

97-84021-14

U.S. Shipping Board
Emergency Fleet Corp.
Report of New England
Shipbuilding Conference
[Washington, D.C.]
1917

97-84021-124
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Box 62	United States shipping board emergency fleet corporation. ... Report of New England shipbuilding conference, under the auspices of the Industrial service department, Division of construction, Emergency fleet corporation, at Chamber of commerce building, Boston, Mass., October 1, 1917. Washington, Govt. print. off., 1917. 52 p. 23 ^{cm} .
1. Ship-building—U. S. conference.	i. Title. ii. Title: New England shipbuilding conference.
Library of Congress	VM23.A85 17-26933
Copy 2.	ONLY 1P

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TECHNICAL MICROFORM DATA

FILM SIZE: 35mm

REDUCTION RATIO: 11:1

IMAGE PLACEMENT: IA (IIA) IB IIB

DATE FILMED: 2-10-97

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United States Shipping Board

Emergency Fleet Corporation

REPORT

OF

NEW ENGLAND SHIPBUILDING CONFERENCE

UNDER THE AUSPICES OF THE INDUSTRIAL SERVICE
DEPARTMENT, DIVISION OF CONSTRUCTION,
EMERGENCY FLEET CORPORATION

AT

CHAMBER OF COMMERCE BUILDING, BOSTON, MASS.
OCTOBER 1, 1917



WASHINGTON
GOVERNMENT PRINTING OFFICE
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RESOLUTIONS ADOPTED AT THE NEW ENGLAND SHIPBUILDERS' CONFERENCE, OCTOBER 1 AND 2, 1917.

Motion made and seconded that this conference vote that it be the sense of the conference that the four points brought up by Admiral Bowles are considered essential to the shipbuilding program and have the support of the shipbuilders and their representatives present to-day. It is a unanimous vote of the conference that these four points express the sense of the shipbuilders as to the fundamental policies in the shipbuilding program.

"On the subject of scamping, to eliminate as far as possible the process of scamping, it is recommended, first, that the employment department of each yard see to it that men from other yards doing Government work are not employed without clearance papers from the local, Federal, or State employment bureau at the point where they last worked.

"Second, that steps be taken to induce the Government to standardize the wage scale and hours of labor in the various yards, taking into account conditions in the different districts. The second point is the regulation of the distribution of talent. It is recommended that the local, Federal, and State employment bureaus be used as far as possible in the distribution of men; that all requirements for men wanted be forwarded to the local bureau and advance notice of contemplated release of men be given to the bureaus.

"The third point, to train shipyard employment officers.

"It is recommended that monthly conferences of shipbuilding officials in various Federal districts or zones be held for the interchange of ideas and methods of employment, these conferences to be called by the district representative of the Shipping Board.

"The fourth point—it is recommended that each yard agree to install a definite program of shop instruction in its own yard, and cooperate with industrial schools and such other educational agencies as may be found available in each locality."

REPORT OF NEW ENGLAND SHIPBUILDING CONFERENCE
UNDER THE AUSPICES OF THE INDUSTRIAL SERVICE
DEPARTMENT, DIVISION OF CONSTRUCTION, EMER-
GENCY FLEET CORPORATION.

CHAMBER OF COMMERCE BUILDING,

Boston, Mass., October 1, 1917.

Admiral BOWLES. Gentlemen, this conference of shipbuilders has been called by the Emergency Fleet Corporation; that is, the corporation created by the shipping act as a part of the Shipping Board activities, and it is that part which designs and contracts for new vessels, and which, as the agency of the President of the United States, has requisitioned all the ships building in the private yards of 2,500 tons dead-weight and upward. Now, at the head of the Fleet Corporation as general manager, its executive head, is Admiral Capps, and he has asked me to read to you the statement that he would like to be here to make.

[Read statement as follows:]

This is the first gathering of representatives from the shipyards since the organization of the industrial service department under the Division of Construction.

The time is opportune, therefore, to say a few words as to the policies of the Emergency Fleet Corporation which underlie the purposes of this conference. There can be no difference of opinion as to the paramount national and world need for ships—many ships. We must have ships for our safety; we must have ships for our sustenance and for that of our allies. These ships must be built without delay. Every rivet driven now is so much gain for the defense of our homes and our country.

Ships can be built, however, only through common action—through cooperation among men. Everything which makes this cooperation prosper counts for the country's good; everything which retards it points the way of national disaster.

Now, this conference emphasizes the benefit of team play among shipbuilders and suggests that the problems common to the shipbuilding industry can be met to a substantial degree by the managers of this industry working to the sole end of responding to the Nation's need with energy as well as industrial vision.

Energy and vision are demanded from both manager and shipyard worker alike. Fortunately, the response in the sense of this demand is encouraging. This conference and others to be organized aim to make such response as durable and effective as possible.

It will be noticed that one feature of this conference concerns itself with the orderly recruiting of shipyard labor. Here a word is in place as to the value of the public employment-office scheme undertaken by the United States Department of Labor and by various States. As managers learn increasingly the use of this great resource, they will find increasing reason to commend the United States Department of Labor and the State agencies for being ready in a time of great national emergency to help

in the very practical way of organizing the labor market. The only alternative to such organization is a chaotic labor market, with preventable unemployment, waste of the workers' time and money, and the holding up of necessary work to be done.

Another feature is the relation of public training resources to the preparation of future skilled workers for the shipyards. Such training is an absolute necessity. It had best be under public auspices and control always. In this way alone is there assurance to the workers that the market will never be flooded with superfluous labor and its concomitant danger of depressing the workers' wage and standard of living. Finally, one feature stresses the importance of a properly organized and centralized employment department in every shipyard. Such department is of unmistakable benefit to every industrial organization. It is surely a benefit to every worker, for it means an end to reckless "hiring and firing," to petty injustices, friction, and ill adjustment of worker and work.

Fortunately, these ideas and principles provide a platform on which management and men can freely unite for their mutual benefit and undoubted benefit to the cause in which shipbuilder and laborer and common citizen alike are deeply enlisted.

Gentlemen, in a few words I will try to make clear what our situation is. The allies depend on us largely for food and for supplies. We must send great armies in the field, and they must be sustained. Therefore, on no other occupation in the United States or anywhere in the world rests such great responsibility as upon the shipbuilder and his men, for ships must be created. Upon them depends victory; absolutely the dependence of victory is upon ships. The Fleet Corporation, acting for the United States, has to-day awarded contracts for some 270 wooden vessels of an aggregate tonnage—dead-weight tonnage—of something over 1,000,000. They have awarded contracts for two hundred and thirty and odd steel ships—cargo vessels—of an aggregate tonnage of 1,700,000 or thereabouts, and, acting as the agency of the President, have requisitioned all vessels building in the shipyards, numbering some 400—that is, begun and not begun—amounting in tonnage to 2,800,000 tons, so that we have projected in the United States to-day in binding contracts some 5,500,000 tons.

Now, what is, therefore, your situation? You have come to a situation where you have as shipbuilders but one customer, the Fleet Corporation, representing the people of the United States. Now, to have awarded contracts and to arrange for the distribution of materials amongst you, utilizing the whole force of the country's resources, to see that you are provided with materials in accordance with your productive capacity—what is your situation? As I see it, the shipbuilding activities of the United States, taking these merchant shipping and naval vessels together, have increased in the last two years from twelve to fifteen times. New shipyards have been created, the older ones have developed their capacity enormously, and you are endeavoring to perform from twelve to fifteen times the amount of work and make one man do the work of three or four. Now, realizing that you have now but one customer, the people of the United States represented by the Fleet Corporation, I have tried to picture in my mind what the result

is of that situation. The great speculative opportunities that were formerly before you for getting rid of your old and unproductive contracts and taking on new ones at high prices—that speculation feature is gone, and, therefore, a great deal of the impetus for the production of ships has necessarily been removed when the situation becomes, as it has, a national one. The Fleet Corporation is disposed and must in this situation treat you liberally, fairly, meet your interests in every possible way. But the appeal to you to-day must be made from the point of view of your devotion to the Nation, your responsibilities to the people for what is an essential, absolutely vital element of the war. You are perfectly capable of enlarging your shipyards and buying machinery and arranging it for the production of this work, but the thing that presents itself to you to-day—you can not, and nobody can, make one man do three or four men's work. Therefore, it is necessary for us, the Fleet Corporation and you gentlemen, to come together and consider this vital situation—how can we make it known to the people that work for us and how can we draw to this vital trade the forces of this country in a peaceful, proper, patriotic, businesslike way? That is the matter that is before you to-day.

In order to show that the Fleet Corporation appreciated the enormous task that is before you, we have undertaken to organize an industrial service department, whose business shall be to help you in these tasks. I am especially proud to be connected with what I call the constructive side of this war and this particular situation. And it has been a great satisfaction to me that everyone to whom I have gone and presented the problem that is before you, of organizing your labor forces for this undertaking, has responded to it at once. I have been able, I am glad to say, to enlist the services of Mr. Meyer Bloomfield and Mr. McNary in this undertaking, and I have charged them with the full responsibility of it. I would like to go out among you and your men and convince you of the spirit that will fill you when you understand the situation, that it is an absolutely necessary matter to get together to win this war. Now, I can't stay with you; I can't do what I would love to do, go out and stay amongst you, and so I am going to turn this meeting over to Mr. Bloomfield, on whom the responsibility will rest of conducting this movement, which I want you to understand will be worth nothing if it doesn't represent your unanimous conclusions.

MR. BLOOMFIELD. This conference is a brass-tack conference to deal with the actual problems before the shipbuilders, but in our situation we have certain friends and neighbors and coworkers equally interested, as is the corporation, in the job. Therefore we have the privilege to call on two or three guests to-day, who come officially to this conference, to say a few words before we open the main business of our meeting. First of all I shall call on Capt. Roberts, who has been sent here by the

Secretary of the Navy to bring us a message of the Navy's interest in the shipbuilding program which Admiral Bowles referred to.

Capt. ROBERTS. The thing I did was to tell Mr. Bloomfield to call on me the last one, because I expected to get inspiration from the intervening remarks. I reported for duty at the Boston yard Friday, having been four years at Fore River, and this order provided they have an officer to represent the navy yard, and having been in touch somewhat with Mr. Bloomfield's work at Fore River, I proceeded to send for Mr. Litchfield, and we have a stenographer here to take down the notes, but I really would like to hear what everyone else has to say before making any remarks myself.

Mr. BLOOMFIELD. Secretary Wilson has sent Mr. Clayton to represent the United States Department of Labor, which is our side partner in the shipbuilding program. One of the main purposes of this conference, and one of its best results, ought to be a pretty deep conviction on the part of every shipbuilder, indeed, on the part of every employer and worker, that the more effective, the more successful we can make the employment machinery of the United States Department of Labor, the more likely are we to find success in the job ahead of us. It gives me pleasure to call on Mr. Clayton who brings us a message from Secretary Wilson.

Mr. CLAYTON. Mr. Chairman and gentlemen, Secretary Wilson left Washington yesterday evening as a member of a commission sent by the President of the United States to visit some 10 or 12 cities on the Pacific coast, there to inquire into the causes of the unrest of which you all know either directly or through the reports in the newspapers. The Secretary would have liked very much indeed to have attended this meeting himself. He is deeply interested in the subject of this conference; he is very much concerned that every activity in the Department of Labor shall be used without waste of time and without waste of resources to help in this monumental shipbuilding task in which you are engaged, and he has given me a very brief message to read for him, which I shall read now.

[Read message of Secretary Wilson, as follows:]

The constructive powers of our country have been challenged so far as the war has yet progressed by no more important task than that of providing transportation across the 3,000 miles of rolling water between our shores and those of France; but American democracy is proving itself equal to the task. The Shipping Board, the contractors whose plants are busy at shipbuilding, the thousands of wage earners who are toiling in them night and day, all help with increasing efficiency to make our part in the world war an inspiring spectacle of unified democratic service. To this work the Department of Labor is not only contributing as fully as its resources permit, but is solicitous to leave nothing undone that may promote efficiency in any industrial service which our country's necessities and responsibilities in the war require. All the appropriate resources of the Department of Labor are offered in aid of the Government's program for serving upon the seas the economical interests of our people and of all the peoples with whom they are allied in this war for democracy, and espe-

cially and to the fullest extent possible the experience and facilities of the United States Employment Service in this department are placed at the disposal of the Shipping Board in furtherance of that industrial program.

The Secretary meant everything he said, because he wants to put the United States Employment Service entirely at the disposal of this program. Now, perhaps, it may be that some of you gentlemen are not acquainted with the United States Employment Service. It is not known as it ought to be; it is not known as it will be before this war ends. The United States Employment Service is not a toy; it is not a baby; it is not a beginner; it was begun 10 years ago. The United States Employment Service was organized in the Bureau of Immigration. The thought was then that it should be used only to place immigrants in some sort of employment that would prevent them from drifting into the slums of the city and into temptation and vice. Shortly after its organization it dawned upon those who established it that it was not fair to American citizens that an employment service should be created solely for the benefit of aliens; so it was extended, and they placed other people in employment. It has grown until to-day it has about 100 offices scattered around the country in some 33 States and is placing about 35,000 people in productive work every month. That is not a fraction of what it ought to do; that is not a fraction of what it will have to do before this war ends. England started about 12 years ago to set up an employment agency, and now has 2,100 offices. That gives you an idea as to the difference in the work of what our Employment Service has done and what England's has done. Our Employment Service must be extended, must be made more efficient if it is to be to us what it is to England to-day. Germany has a very extensive employment service, so extensive that it covers every little town, and one of the reasons that Germany is so successful in this war is because it has so thoroughly organized this employment department.

Admiral Bowles spoke a few minutes ago about the labor market. There isn't any such thing as a labor market in the United States. Instead of this we have a series of accidental conditions that get us nowhere. Labor market—why, the word "market" implies organization, forethought, and we haven't any such thing. When a man gets out of a job in this country, he finds another, and when the jobs want a man you will advertise or send a man out to hunt for somebody, or you will put a sign on your door and hope somebody will come along that will fit the job. We haven't any labor market. Now, the Department of Labor has a plan fairly worked out for the extension of this Employment Service system until it reaches and meets your needs. It intends to start that work immediately. The plan is dependent somewhat upon the goodness of Congress, and we have had in Congress for several months a bill for additional funds, because we foresaw this thing which came

upon us; but we have hopes that Congress is at last going to see the need and give us the money. Whether they give us that money or not, the Department of Labor is coming to your rescue and do what it can, and the Employment Service is going to be a most valuable aid to your program.

Now, in conclusion I want to say this: No employment system is valuable unless it is utilized. England found by experience that an employment service system is of most benefit when it is made the sole source of obtaining labor. It sounds a little funny, but they don't hire a man when he calls at the door of the factory; they send him down to the employment office. "If you want a job, go down to the employment office," and the reason for that can be given to you in half a dozen words. The other day I happened in Philadelphia to be in an employment office, and they told me that that morning they had counted 800 men at the shipyards asking for work, but had been able to hire only 50. They needed 1,500 men. Why didn't they hire the other 750? Because none of the other 750 had the qualifications. It isn't the shortage of labor, it is the shortage of competent labor. You can get 1,000 men to call at your yard; you can't pick more than 10 per cent of them that can be used. The others don't know anything about shipbuilding. We have got to organize our forces into two departments—one to find labor, the other to make that labor competent. The Department of Labor wishes to be of service at both ends of that most important work. We will help you to find your labor. We also want to help you make the labor efficient after you obtain it, not to send you men that can not be used. Therefore, we should take up, I think, the English custom of sending all those men down to the employment office.

Mr. BLOOMFIELD. A word about the underlying reason for calling the first shipbuilders' conference here in New England. Of course, in a way it is a logical thing to start from here and go to other zones in the course of time, as I think we shall, but there was a very special reason for calling the first conference right here. The main reason is that a peculiar combination of cooperating agencies may be found in this district. In the first place, our chamber of commerce from the beginning of the war has had its active committees on shipbuilding, maritime service, and so on. In the next place, the United States employment office and the State scheme of employment offices have been at the very active and abundant disposal of the shipbuilding industry. The detailed story of that you will hear in the course of the day, and it is very important that you hear of it in detail so that if the same type of cooperation does not obtain in your district it is for you to find out the reason why and to get them on their job. You will be very much impressed, I venture to say, right now at what you will hear and see in connection with that cooperation. If we were to send you a thousand circulars a month pointing out how things ought to be done, I don't

believe you would get as much practical benefit as you will when you hear from the actual heads of these offices just how they fill a shipyard requisition, and you are here to get the practical points connected with the organizing of labor supply.

Now, the next cooperative agency has been our Massachusetts Board of Education. They have studied the job of training different shipyard help, and they worked on it and delivered the goods, and you want to hear that story, because in the different States you come from you have a board of education, you have a scheme of vocational education, and now under the new law providing Federal aid to every State there is a very immediate reason why you should see how far you can get money for the training of shipyard help. Therefore I am going to call—before we get down to the other sections of the program—I am going to call on the Massachusetts commissioner of education, who has been behind this work with his deputy, Mr. Small. I am going to call on Commissioner Payson Smith to say a word on the shipyard training problem.

Mr. SMITH. If I am to keep to the keynote set by the officer at the beginning and make this a brass-tack conference, my contribution should be very brief. Remarks will be made by Deputy Commissioner Small, who is directly responsible for the plan of vocational education and has been directly in touch with whatever program has been inaugurated that will be of particular interest to you. I ought to say that this scheme or system of vocational education in Massachusetts which it is proposed to have helped in this program is only that of a 10-year-old boy, and therefore not organized to the extent and efficiency that our scheme of general education perhaps has been; but this scheme of vocational education was organized a little less than 10 years ago in order to supplement a form of education we already had in order that we might make our boys and girls economically efficient. That scheme of education was set up for the benefit of the future of Massachusetts, for the service of Massachusetts, and for the service of the Nation. And I want to say to you gentlemen that whatever the State of Massachusetts has in its organized departments—I am sure I can speak for all of them when I speak of one—everything is at the service of the Nation at any time, but particularly at this time, and this vocational education of ours is in every way it is possible to be at your service.

Now, then, I want to point out to you just two or three of the practical difficulties, perhaps, that obtain in the adaptation of this system of education to any peculiar difficulty or any peculiar situation. In the first place, we have to consider that education is a long-term proposition and that we who are engaged in these programs of education for the youth of America must think not only of the America of the present, but the America of the future. President Wilson has said that we have gone into this great world war in order that we may make the world safe for

democracy, and a million or more of our young men have enlisted in this great army and millions more are ready to rally that this thing may be accomplished, as it will be accomplished. We have millions of other young men who are engaged in other pursuits, and their business is to make democracy safe for the world, and we of America have appreciated and believe if we are going to make democracy a safe instrument in the hands of the people we must have an intelligent, efficient citizen. We who are interested in education are determined that we will not, as far as possible, make the mistake England made at the beginning and reduce the efficiency of education, but rather we will try to make it more efficient and more productive of the results we ought to aim for, for the future of America must keep true to its fundamental purpose, and we have our long-term program that must be carried out. We want to address ourselves to that task fully and just as conscientiously as we can in order that there will be no defect that will appear in the future in that line. Now, again, we appreciate that while we do want to keep this scheme of vocational education in line with these future needs, we also realize that in order that there shall be that future of America the America of the present must do its part. Schools are going to be obliged to conform to various demands that are going to be made upon them in order that they may be of service in this exigency, and this vocational scheme of ours may be adapted to that. What we are very anxious to do is to learn what lessons we ought to out of this crisis that exists just now for vocational education of the future. All of us are having shown to us just now some weaknesses that we did not know before we had. I am entirely conscious of the fact that education in our country is showing now that there are certain points with regard to which it has been neglected, and that we ought to learn those lessons out of the present crisis to make our education of the future more efficient as a long-term proposition. That is what we want to do. Your problems are a part of that. The other thing is to make use of this education as far as we can in the crisis that exists. Mr. Small is going to tell us just how far, as he has studied the situation, we have gone and how far we can go.

I want to point out to you, however, two obstacles. In the first place, the industries are lacking in material. These boys who ordinarily would be going into the school at 14, 15, 16, and 17 are now being called off by all kinds of industries, by the high wages that are being paid, and instead of having the material in the way of young men to be trained, we lack that material because they are not going to the school. Therefore, it is the work of the school to extend the school into the industry, and that means cooperation of the men in charge of the industry, and that cooperation will be given, but, as a matter of fact, they haven't this material, it having been drawn away from them by reason of the present situation. The other thing is that these vocational schools of ours and all of our activities rely, as all other public activities do, upon funds, and upon

funds to be raised by public taxation, upon public funds that we can not draw upon, Government funds, except within certain limitations of a statute which was enacted not for war times, but for peace times. We have no unusual source to draw upon, and we still have to go before these various Government bodies to defend any proposition we may put up. Our appropriations, limited as they have been, have been made available by action of a legislature or by councils of towns. Therefore, there will be limitations upon your service, our ability to go into this work, because of the fact that we may not always be able to carry a city council or a committee upon ways and means or a State legislature, and as far as we are able we would be glad and willing to go, but I think you will find in the main job you have our interest is with you, and we will be willing to cooperate in every way we can, bearing in mind always to make our education count not only for the day and the moment, but for the time that is to come.

Mr. BLOOMFIELD. We want to make this a real conference. We want to have all sorts of questions brought up and the session carried on in the most informal way. It was not the idea to have a day of set subjects, but to come and talk and get down to the actual job of the shipyard. By and by Mr. McNary will take up the industrial end of the program, and I think you will find that the Emergency Fleet Corporation has been pretty busy-shaping up, perhaps, the most far-reaching scheme of industrial training this country has ever known. Now, nothing will help the informal character of this conference so much as to know who is who, and with your permission I am going to interrupt the program a moment for a rapid-fire self-introduction and each man will please rise and give his name and position, and if everyone will do that we will get an idea of who is here and perhaps it will help in the talks that are to come.

[Gentlemen give names and positions as requested.]

Admiral BOWLES. Mr. Bloomfield and gentlemen, I think you ought to direct your attention here to-day to four propositions, and everything that will be brought before you, and the discussion, I hope, will be directed to these conclusions. First, I hope you will agree that production will not be increased by the process of robbing one another of employees of any class. I hope you will agree upon some method of distribution of the available shipbuilding talent, by which it will be put to the best use but by which no one will be crippled. Now that, of course, can be done by arrangement between you on some sensible proper line. I also hope you will agree that it is necessary to train your employment men. I know that there are throughout the United States thousands of young men—young lawyers, young professional men—who are willing to volunteer their services to assist you in this work and whose services can be obtained through the agency of the Fleet Corporation. I want you to extend a welcome to those people and to adopt a system of training for them by which the employment of men will be intelligently carried on.

Fourth, I ask you to agree to establish as soon as possible a system of training in allied trades to make them efficient for shipyard work, to the training of unskilled labor and young men for the same purpose. These things can only be done by your agreement, your active cooperation, and the Fleet Corporation is ready to spend the money to produce the system, the burden of which must rest upon you as a part of your responsibility.

Mr. BLOOMFIELD. In view of this statement I may take a minute to speak of the plan of the industrial service department. Mr. McNary will describe this afternoon a scheme for intensive training of teachers for shipyards on the basis of 150 teachers from all the yards for a six weeks' course, in units of 150 for six weeks. Within a short time it ought to be possible, at least, to prepare a large proportion of the new help and competent help needed. That part of the program will be described in detail. We are going to call probably in Washington before long a technical conference of employment managers alone. The employment managers will be asked to come there in order to agree on certain fundamental principles and standard practices in the hiring and handling of help. Now, there are shipyards, to be sure, which have set a very high standard in that field, but like every other industry in the country there is a good deal to be done in jacking up employment work so as to secure a proper flow, a proper assignment of help to suitable jobs, to secure more effective methods of stabilizing help and reducing the large turnover of employees which exists even in our shipyards.

Now, we have two problems in the help field—getting help and keeping help—and each is some job. The employment managers will be asked to come for the purpose of formulating a program. Your companies have already been asked by the corporation to fill out a blank which will be sent weekly to the industrial service department, which will enable the department and the corporation to have, as it were, a sort of a weather-bureau chart covering the flow, the scarcity, and possibly the adjusting of labor flow in certain districts. Now, so far as my own department goes, we are at your service. The office is open to you at all times for such problems as you think come within its scope and for such problems as you think our experience may be of some help in trying to solve. In addition to this, when my chief gets ready for it, some of us will be out in conference with you in going over your own employment organization in detail. There ought to be some practical result from attention to the employment problem as such. In addition to this, the industrial service department is working daily with the United States Department of Labor in perfecting an employment machinery which can respond as early as possible to your needs, both emergency and near-future needs, for certain grades of help. Finally, there is this program, the program of cooperation with chambers of commerce, Y. M. C. A.'s, and other sources which can build up a public sentiment in favor and encouragement of the big

task you have, so that no one force at any stage may fail to work in any way which fails to strengthen the job you have on hand.

Now, I am going to ask Deputy Small to give us a little more practical insight as to how the State department of education is shaping up in Massachusetts to help the shipbuilder train his help.

Mr. SMALL. Commissioner Smith informed you in regard to there being a system of vocational schools in this Commonwealth. We have made but one single contact up to date in doing anything for the shipbuilding industry, and that is through the vocational school, both the day and evening school, which is located in Quincy, where also the Fore River Shipbuilding Co. is located. Some time in May our office was approached by the superintendent of schools, asking—the State normal educational schools, or the expense of maintaining these schools, is borne fifty-fifty by the Commonwealth of Massachusetts and the local community—the superintendent of schools approached our office to know if the Commonwealth would go into a new department, namely, to undertake to finance and help direct and train inside of the shipyard such men as were presented through the employment department as desirable men to train for skilled trades common to shipbuilding. That entailed a new department which we had not gone into, and so far as our law is concerned it was possible for us to cooperate only to the extent of training in day schools those people who were below the age of 25 and in evening schools only those people who had already made contact with a specific industry. But I said to Mr. Barber, the superintendent of schools, "Whereas that is all we can do under the law, we will certainly do whatever is possible to do. We will cooperate with you to train anybody who presents himself, so far as we know how to offer that training, and we will go before the legislature at some later date to see if the legal part of it can be straightened out and corrected so that we can give the city of Quincy State aid for all of them."

At the present time we can give the city of Quincy State aid for only part of them, but we are cooperating along the whole line. Now, that being the relation of the State to the local community and one particular yard, I will say something as to what we have done in that instance. We have deemed that the most effective kind of training at this stage of the game was to train the men in the yard right on their jobs, and so we have set up a definite portion of each man's time who presents himself for training to be under an instructor. That instructor is responsible to the educational department at the yard and of the State, and whereas the man is under a foreman in the yard, production is not the main job of that period of time. It is instruction, for the purpose of making the man more productive later. Now, instruction doesn't mean technical instruction, sitting down with a book or the studying of technical things, except as that is what the individual needs. It is an individual problem. I can't come to you with any course of study and say, "This

is what we do down there." What we do is to take the man who presents himself, the instructor finds out what he needs, and after a certain period of time in the shop he gives him instruction along that line. The matter of choosing jobs as to what that man needs is a course of study, and I assure you it takes pretty highly organized ability and pretty carefully directed ability to select and choose jobs that have the necessary elemental contact to supplement and help the different individuals who come along. But that, to my way of thinking, is the only way that education can come in and do anything to help train men in the shipbuilding industry. We have made contact with men being trained for the mold-loft work, and the machinists need both in machining iron, steel, and copper.

Now, then, the other side of the question in regard to what we are prepared to do in this State takes us away from the yards. I believe that to the extent you can utilize your yards and your shipbuilding plants and not tie up machines so that your production is lessened that the yard is the place to do this training; that it must be done upon the very definitely and well-organized basis which Mr. McNary and the experts who will be associated with him will be ready to help you in planning and laying out. But over and beyond that there are in this State a number of vocational schools located in the larger cities of the Commonwealth, and not to guess about this subject, but to have it upon a basis better than a guess, one of the schools (not located at Quincy, not located in the metropolitan area but distant from this shipyard) has had one of its instructors visit and make a good deal of a study of the various trades carried on in the shipyard and make an analysis of what was needed and make a statement of what proportion of the work can be done separate and apart from the yard, and there is a considerable portion of the training which we feel, on the basis of this information, can be undertaken away, separate, and apart from these yards, a preliminary training which will fit the individual to come in and take his place at a more advantageous stage than he would if he walked in off the street. Now, then, the problem to do that piece of work away from the yard is, as has been indicated by Mr. Clayton, I think, the problem to get some people to take the training. It is an employment training. Commissioner Smith indicated to you that whereas we are ready to do all we can, we are limited as to funds, because in this Commonwealth we are dependent upon local communities and then we come along and reimburse them.

We are limited as to funds available, but more serious than that, we are limited as to individuals available to take the training. There may not be any labor market, as has been stated, but certainly the people who are offering themselves for labor are gobbled up pretty fast, and there are very few of them who are willing to forego earning for the purpose of taking training in order to land a job some two months or three months hence. Now, that is the problem we need considerable assistance in. It

seems to me it is the problem of employing first and training that employment and paying during the period of taking the training. Now, then, if that can be solved and the great number of conflicting difficulties that have got to be smoothed out—if that can be solved, there are a good many of these things every day. If it is green help we are going to train, absolutely green help not members of an allied industry, there is a lot of this that can be done in Newton, in Springfield, and in Worcester, and all over the Commonwealth, and that is the one particular phase of the thing that our board of education is particularly interested in. I, perhaps, have taken more time in going into this matter than I should, but I wish to say that anything we can do with the limitations which surround us we shall be glad to do, and we shall be glad to try to get rid of some of those limitations in the proper way and at the proper time.

Admiral BOWLES. It is essential to us in the task we have before us that we have, as Deputy Small and Mr. Smith of the board of education have expressed their approval of the scheme that is before us, their moral and their active support. What we need is their personnel and their machinery to be loaned to us to meet that emergency. Fortunately, we do not have to deal with selectmen nor city councils nor legislatures. Congress has done this work. They have authorized for the Fleet Corporation appropriations almost amounting to one billion dollars for immediate expenditure, and the authority given to the Fleet Corporation for the construction of vessels and the completion of those requisitioned to-day amounts to two billion dollars.

Mr. BLOOMFIELD. We want to hear a word or two from the representative of the Boston Chamber ship committee and also from the United States Chamber committee, because in different cities, Philadelphia and New York and elsewhere, the local chambers there have organized ship committees. I will ask Mr. Ewing, who has been detailed by the Boston Chamber shipbuilding committee, to say a word.

Mr. EWING. Mr. Chairman and gentlemen, the Boston Chamber of Commerce is very glad, indeed, to have this meeting in its building, not only because it wants to be generally useful, but because from the time we entered the the war directors of this chamber have felt that this was, to speak mildly, one of the prime considerations of the Nation—the building of ships. Our committee under Mr. Fitts's chairmanship—the other members not being connected directly with shipbuilding, but representing various elements that are necessary to consider the problem—this committee was appointed and has had some experience, which may not be of general interest to you as so many come from outside of New England, except as the problems are probably very similar in all parts of the seaboard. We tried to find how we could help in the manufacture of more ships. We ran down one line of fleets; we ran down another line of fleets. In the matter of transportation, for instance, we found it

was a national problem and could not be handled in a local way. The National Government had taken up that problem, and it seems to our committee the chambers of commerce can be most useful in standing ready to give their services when called upon by proper officials. One great problem we found was this problem of securing sufficient employees; not only that, but the problem of manufacturing employees, because it was necessary, for example, in one plant near Boston to increase from 4,500 employees to 10,000 employees when every machinist in the vicinity was working full time. We had a committee formed, which was very representative of the educational work in this vicinity—Mr. Small, of the State board of education; the assistant superintendent of schools in Boston, who has charge of industrial education; the heads of Wentworth Institute, Franklin Union, and Massachusetts Institute of Technology. We rounded up on paper all the schools in this part of Massachusetts near the seaboard that could be used.

We then offered the services of all those schools to the shipbuilders in this vicinity. What was the result? I presume the same result that others of you have found in your communities and that the Government will find when it comes down to this same problem here, that it isn't the case of taking boys and putting them through these schools for the immediate problem. The immediate problem is taking full-grown men and giving them the intensive training that is needed, not only in the shipbuilding but in the trades which make the parts that go into your ships, which is just as important as the ship itself. Machinists, for instance, must work in plants that are making dynamos and all those things as well as the shipyards themselves. It seemed to us expedient to offer all the shipyard education that could be offered in this vicinity, which has been done. But when a man is working and receiving pay for his work, he isn't going to leave his job and go to school for several months and then come back and earn a little more pay. So the problem was to get these men into these schools. We took the problem up with the shipbuilders and also with the Government and with Admiral Bowles before he was connected with this work. What he has said this morning gives me great encouragement, because we got an oral assurance from the officials in Washington that they would give as part of the cost of making ships the wages of the men while they were under instruction in these schools, but when the shipbuilder himself came to get that in writing it wasn't forthcoming, and never has been. But now the problem, it seems to me, can be faced in quite another way through Admiral Bowles's department and worked out to a satisfactory conclusion, because it is quite evident men must be paid while they are taking this instruction, and that the employer, the shipbuilder, can not very well take it out of his own pocket to pay those men.

On the other hand, he probably wouldn't desire the 10 per cent, or whatever it may be, of the wages of the men while they are under instruc-

tion. We feel here, not only in the chamber of commerce but all those other educational facilities I have mentioned, we feel it will be by far the most efficient to use such plants as we have rather than to create entirely new educational plants, as has been attempted in one or two cases that we happen to know of. It seems as though these educational plants right around along the seaboard should be used to their capacity—very likely could be used on two or three ships. There is in some cases further expense. In the city of Boston schools, for example, the plant would be offered free, but the lighting, heating, and instruction would have to be paid outside. In private and endowed schools that wouldn't be the case. One of these endowed schools offered to pay all expenses, not including wages, if a shipbuilder would send a certain number of men there for instruction; but they didn't turn up. The whole thing turns upon paying those men while they are under instruction, because if they are not paid no one will turn up but boys.

I want to say that the Boston Chamber of Commerce and all of its facilities will be at the control of Admiral Bowles or any other person who is working out this problem to carry out and expedite this work.

Mr. BLOOMFIELD. Mr. Sumner Myrick, of the shipping committee of the United States Chamber of Commerce, will now speak.

Mr. MYRICK. Mr. Chairman and gentlemen, I suppose it isn't necessary to say here what the Chamber of Commerce of the United States is or what it stands for. In a word I may say, however, for the benefit of those who are not familiar with it, that the Chamber of Commerce of the United States is made up primarily of representatives of all the chambers of commerce, practically all the chambers of commerce and trade organizations, throughout the country. There are nearly a thousand of such organizations represented in the national chamber. Then, besides that, there is a large individual membership. The chamber is relied upon very largely by the Government to test out the sentiment of the business men of the country in respect to measures which the Government advocates. It has a practice of sending out statements of these measures and taking a referendum—taking a vote of the business men of the country. Now, at the beginning of the war the Government was very anxious that the business men of the country should respond in a patriotic way to the business that was demanded, and the chamber was called upon to appoint various committees, and those committees are now actively at work in cooperation with the Navy Department. Among those committees was one of war shipping, and I have the pleasure of being the vice chairman, and there are representatives from various parts of the country on this committee. Then, in addition to that, we have organized some 25 local committees in shipbuilding districts who are cooperating with our national committee and with the shipbuilding committee.

Now, very briefly, we started out to do this: As has been stated here and as you all realize, the fundamental necessity of the hour is ships. Armies and all the rest of it are of no avail whatever because we can not transport them to France if there are no ships. Now the first thing was to create a public sentiment to educate the people up to the idea that ships were the primary and fundamental idea of the moment. We have done that through the newspapers and in various other ways. We are going to establish a publicity bureau to act in cooperation with the national committee of Washington to send broadcast through the press and other ways the necessity of ships, to which we all agree. We are going to arrange a reel, have a reel made, which will be put forth in the moving-picture houses showing, for example, a man going to the gate seeking employment, then taking him through the yard, showing the different work he does, and showing steam launches and things that will interest the general audience, interspersing the pictures with statements calling the attention of the audience to the necessity of ships. Then, again, we have done our little bit or tried to in reference to the labor problem. At the very outset of our work we were fortunate to have the advice and cooperation of Mr. Bloomfield, and in certain sections of the country we have accomplished some, we think, splendid results. In the South our national committeeman, Mr. McCloud, of Charleston, went out into the interior towns of Georgia and South Carolina, had business men and employers of labor to meet him and explained to them the necessity of getting laborers down to the shipyards on the coast. In some districts, Atlanta I recall particularly, one large employer of labor said that he was unwilling for anyone to take labor away from Atlanta, because they were building cantonments, and he didn't think it fair that anyone should take their employees away; but after he heard the statements of Mr. McCloud of the necessity of having ships and the labor to build them he threw up his hands; he was willing to let Mr. McCloud have every employee he had, and urged the business men of Atlanta to let their laborers go until after the war.

In some of those districts we had men volunteer and sign agreements that they would upon call go down to the coast. We have had some celluloid buttons made called "Ship laborers reserve," which those men wear. The other day we were asked by one of the shipbuilding concerns on the coast to send down 125 men. We got 130 men out of one town and had them down there the next day. These men had enlisted, so to speak. Now, you have got to get them upon the question of patriotism. That is what these gentlemen have done in each instance. They have found splendid response. Make the men understand that when they go to the shipyards they are performing almost as much of a service as if they went to the trenches. In addition to that we have had some badges made. You know in England that everyone who is helping the Government to prosecute the war wears a badge. There was nothing of the

kind in this country until we got these two badges. We have sent out about 9,000 of these badges. Some of you gentlemen have them in your yards. We have two sizes. You will find the larger is the one most desired. We have sent them to the Pacific coast; we have had employees write in and ask us to send them to them. We haven't done so, because we intend to have them sent out through the proprietors of the yards themselves, but whenever they get the idea these employees usually have responded by ordering them. We have had executives make up subscriptions and send in an order for these badges, because they have felt they wanted to wear them as much as their men. Now, I want to say these badges are going to be here on the table. If you want to take one, I hope you will do so. I want you to be very careful not to let them get out of your hands, because it is a testimonial, of course, that the laborer is working for his country. I am going to read a very brief statement of the condition on which these badges are presented:

1. The badges are to be loaned to the workers in shipyards during their term of service and are to be worn as an emblem of patriotic, faithful service rendered to the Nation in time of war.
2. They shall be surrendered by the workers at the termination of the service, and the shipbuilders shall enforce such rules as shall make the surrender effective, the purpose being to confine the distinction the badges confer to those who have earned it by faithful service.
3. That every worker in the service at the termination of the war shall be given his badge outright in the expectation that he will preserve it as a memorial of his contribution toward making the world safe for democracy.
4. That upon the receipt of the badges the shipbuilder shall sign an agreement containing the terms herein stated.

It seems necessary that there should be something of the kind prepared and that it should be put in a conspicuous place in each yard, so that each man may know the terms upon which his employer has accepted the badges. Now, in this connection let me say we are having prepared a shipyard recruiting poster.

Those posters are going to be put out where there are shipyards; they will be put on express wagons, everywhere they will be seen, and they are so attractive they will no doubt help a great deal in the problems we have before us. The national chamber is not seeking any self-glorification; it is not trying to interfere with anyone's business; it is not trying to tell you gentlemen how you should carry on your business. It has entered this campaign in a helpful spirit, and we believe we are doing good. Chambers of commerce and the local committees we can form. We are capable of help, we think. We propose to act in cooperation with the different committees. We are to have a meeting in Philadelphia to-morrow that is to take up this very same problem of enlisting the laborers in the State. Whatever we do, we shall do in conjunction with Mr. Bloomfield and the Department of Labor, but that is what the department has tried to do.

I forgot to say that these posters, labels for shipping, we have sent out nearly 30,000 of those posters to the shipyards of the country. We have them of different sizes. They are being put on the packages as they are shipped from the factory to the shipyards. Now, in addition to getting direct results from the shipping posters, the recruiting posters I have told you about, besides inculcating the spirit in the employers of wearing the badges, there is psychology in all this. You know you can't get things done in a large way unless you have the public with you. If it is a liberty bond, or a Red Cross fund, or whatever it may be, you have got to get the people stirred up. Now all the things I have told you about have the effect of interesting the people in shipbuilding. Every man who sees a poster like that goes away with a new thought about getting ships built. Every man who sees a recruiting poster, the same way. Every man who sees a man wearing a badge realizes that man is engaged in something important in winning the war. So that while all these agencies have a direct influence in producing these things we desire there is a direct psychology.

Mr. BLOOMFIELD. I want to recall the four points which Admiral Bowles made and to confer with you for a moment as to the action necessary. Admiral Bowles thought there ought to be some united expression of opinion—not necessarily at this meeting; it may be done by writing—some expression of opinion as to the scamping proposition in the shipyards, the raiding of the working forces. Of course, there is no suggestion implied in any shape or manner that workmen are not free to go anywhere, to follow what they regard as their best interests. The suggestion of Admiral Bowles is the possibility of danger in an open or a private invasion of one another's working force. Of course, the Emergency Fleet Corporation has absolutely and clearly and positively forbidden that practice, and it means absolutely what it said in the stand it has taken, and the corporation knows exactly how to deal with any such interference in the work of shipbuilding. The second suggestion which the admiral brought out is the distribution of talent. I recall one instance where an employment manager I saw in the office of his employment department in the shipyard was told by the head of a certain shop that he would have to release nine men whom he could no longer carry. They were doing the sort of work which was not then of an emergency nature. In the first place, may I point out to you that that was good organization for the employment manager to be told by the foreman or leading man that nine men could be disposed of. No. 2. That employment manager felt it his duty to notify the labor office, saying that nine men would be available in a day or two, so that employment office could get on the job and see what other shipyard, to begin with, would need those men. Now, that is good business. That is the kind of thing the admiral had in mind when he talked about distribution of talent. I suppose we will face the question of priority of labor as we have already

faced the question of priority of material, but short of drastic action there is a good deal that can be done, as that illustrates.

Third, the training of shipyard employment officers. It may be premature to act now, possibly. From my visits to the shipyards, there isn't a shipyard in the country, however competent its manager—there isn't a shipyard which wouldn't welcome an arrangement whereby the employment men may be called together and exchange ideas, that their work may be more efficient. Fourth. To establish vocational education. Is there any suggestion here as to how we shall cover the suggestions of the admiral? Do you want them discussed? Do you want to take a vote here, or would you prefer to write to Admiral Bowles, giving your views as to these four points?

DELEGATE. Of course, we all recognize that those four points are the main points, and we should all work to get over those points and arrange them to the convenience of all. It seems to me that anybody who has any suggestion to offer to further those points would be of more value to this meeting than anything else that could be done as to expressing our opinions as to an agreement on them. I think we should express them now and make an agreement that we are unanimous in regard to those four points.

[Motion made and seconded that this conference vote that it be the sense of the conference that the four points brought up by Admiral Bowles are considered essential to the shipbuilding program and have the support of the shipbuilders and their representatives present to-day. It is a unanimous vote of the conference that these four points express the sense of the shipbuilders as to the fundamental policies in the shipbuilding program.]

Mr. McNARY. I will suggest that the four points that you brought out be printed and passed around at the meeting this afternoon.

DELEGATE. Are those badges issued by the chamber of commerce or the Emergency Fleet Corporation?

Mr. MYRICK. They are issued by the chamber of commerce, but they are indorsed and authorized by the Emergency Fleet Corporation.

Mr. MYRICK. The badges are all numbered in the first place, and when they are given out you know the man's number. I may say we have put out 9,000 or 10,000 of these badges and haven't had any trouble. The conditions state that each yard shall establish rules and establish methods that will insure the return of the badge. There should be established some limited term of service before the badge is given out. On the other hand, there is a feeling that immediately a man enters the service he ought to be appealed to to stay in that yard and do his bit, and immediately he gets the badge he begins to have that feeling of patriotism, of patriotic service. But it is a question for you gentlemen to determine in your individual yards.

Admiral BOWLES. Mr. Bloomfield, the Emergency Fleet Corporation approved the issue of these badges on the condition that the chamber of commerce should make them significant of constancy of labor and devotion to its work. Now, Mr. Myrick has endeavored to make these general conditions for the issue to meet the situation that was presented to him by the Fleet Corporation. His idea was that he should not draw up particular rules applicable to all shipyards, but should lay down general conditions which they might make specific in their own cases, and it seems to me they are sufficient.

Mr. BLOOMFIELD. We have taken note of your suggestions, and the minutes of this conference will be transmitted to Admiral Bowles. Before President Powell runs off to the typical duties of a shipbuilder we want to hear a word from him, as we are going to visit his plant to-morrow afternoon. I should like to present President Powell.

Mr. POWELL. Gentlemen, I want to welcome you all to Boston to this first labor conference and to extend to you an invitation to come down and look over what, under Mr. Bloomfield's very wise instruction, we have been trying to do down at Fore River. He has taught us a great many things about the employment of labor that we didn't know. He has opened up to us a great many fields for obtaining labor that we didn't know, and I am sure that the things that have been done successfully in our yard can be applied with equal success in many other localities. I want to say that in trying to build up our force we have been very much beholden to a number of agencies, among them being the Boston State free employment office, the United States Employment Service, the Providence State free employment office, the Worcester free employment office, the various Y. M. C. A.'s and their industrial secretaries, and the State educational institutions in training men. Most of these were agencies that we didn't know about when we undertook to double our force, and we have received the most courteous treatment from their hands at all times, the greatest willingness to cooperate; and not only that, but a great deal of judgment has been used by all of these agencies in the class of men they have sent to us. I must run away now to catch a train, and in leaving I want to say that I am sorry I can't put in the afternoon with you, but I am sure you will learn a great many things that will be valuable, and that we will be very glad to see you to-morrow afternoon.

Mr. BLOOMFIELD. It might be well to appoint a committee to take up the four points Admiral Bowles presented, and before the meeting is over that committee might bring in some amplified statement as to your position in regard to the four points Admiral Bowles brought up this morning. Does this accord with the wishes of the conference?

Mr. FERGUSON. I move the chairman appoint a committee of five to go over these points and frame up recommendations and submit them in the course of the afternoon.

Mr. BLOOMFIELD. You heard Mr. Ferguson's motion that the chair appoint a committee of five to draft suitable recommendations.

Mr. BLOOMFIELD. The motion is carried. The chair will appoint, if you will be good enough to serve, Mr. Henderson, of the American International Corporation; President Dunlap, of Alabama; Mr. Larkin, of Fore River; Mr. Smith, of Newport News; Mr. Kochersperger, of Cramps. That committee can retire as soon as it pleases. We will start with the public employment office. I would like to ask Mr. Clayton if he won't introduce the subject of this part of the afternoon. Then we will go on and hear from the officers of the bureau.

Mr. CLAYTON. Mr. Bloomfield and gentlemen, I did not expect to take two shots at this interesting conference. I can't resist the temptation, however, because there is a great deal to say about the question of employment. I talked this morning about the labor market, and I want to say just a word or two more about that subject. Some years ago the London docks, some 10 in number, got into a very bitter strike, and as a result of that strike there was an investigation. This is, roughly stated, what they discovered. Each of those docks needed about 900 men, but in order to get the 900 men each of those docks was trying to keep on its pay roll about 1,200 men. So in order to get 9,000 men among the 10 docks they were carrying on their pay roll about 12,000 men, and of course you know what happened. When they started work in the morning they took on the first 900 men that came along and sent away the other 300 men. The average pay of the men employed on the docks was starvation wages. Nobody got a full week's work unless he was exceptionally lucky. The average man didn't get much more than enough to live, and that is what brought on the strike. They tried to find some way to mitigate that state of affairs, and they did by creating a common employment agency. They had some little difficulty in working out the plan, but finally they worked out a system, and then they discovered that they could not only have a common employment agency, but as none of the docks were running full all the time, they could get along with 6,000 men and still supply the docks that were running full at one time with 900 men. So the London docks sent 6,000 men away and let them find employment elsewhere and gave steady satisfactory work to half the men that had been there before, and strikes and trouble on the London docks came to an end, and they haven't had a strike on those docks, as far as I know, since that time.

I am not saying that an employment agency is a solution of all strikes and troubles, but conditions similar to the conditions that existed on the London docks will be found to exist everywhere where there is a large number of help employed. Not very long ago I was in one of our seaports. I was down there investigating some conditions. I found one large dock that needed 600 men and was employing 900 men, and was actually getting only 450 men. I asked the manager

why he had so much trouble. He said he couldn't imagine what the trouble was; it took 900 men on his pay roll to get 450 men to work on the dock. I found that most of the men were hustling for some other jobs to keep alive and occasionally going down to the dock to get work there. That is, exactly the same thing was going on at that dock as went on at the London docks 10 years before. He had too many men on his pay roll. I suggested to those people there that they establish a common employment agency and hire all their men through one centralized point and see if they can't cut down some of the unrest that is obtaining just now at that point.

Now, what I am telling you is for the purpose of illustrating the principle that an employment agency is the means for establishing a reserve for the employment of labor. There are always a great many people looking for work that are not capable of doing the work for which they apply. A common employment agency does two things: It gets rid of the waste reserve you have to carry to get the necessary number of men. On the other hand, you will be able to send those men somewhere else, and it may be possible to get some other men who are engaged elsewhere and whom perhaps you can use. That is just a suggestion about the philosophy of the employment problem. I have been advised that in the tenth shipping district to-day there is a shortage of something like twenty-seven or twenty-eight thousand men in the shipbuilding. That is an awful shortage. That is probably about one-third of the shortage in all the shipyards to-day. Now, I don't think there are competent men to-day in the United States to fill all those jobs, but I am sure there are men enough in trades near enough in principle to be taken and broken in to meet all the needs of those yards, but it can only be done by a common collecting agency. It can not be done by you men each working individually and each working in opposition to the other. You have got to do it together; you have got to pool together. Now, we come to you with a machine for pooling, and it will be serviceable to you if you use it and it will be worth nothing to you unless you use it. We want you to realize what an employment agency can do for you if it is used. Right there I have to digress just a little. I want to say to you that since last April the Secretary of Labor has been trying to get from the godfathers on Capitol Hill, the Congress of the United States, a sufficient appropriation to spread this employment service all over the United States. The amount of money he has asked for for that purpose looks like a ridiculous sum when you think of the millions that are being spent in building ships and the other millions that are being used in supplies.

This is a wonderful adventure we are engaged in. It is a romance of the world's war. Sixty years ago my own folks from down South helped to nail the coffin down on America's once merchant marine. This war will bring back the Stars and Stripes to float over every port, and in that task every American has an interest and every American may take

an effective part. I want to suggest that while one may estimate the cost of tools or of land as elements of material, the contribution of those men who are working for wages in this adventure should not be considered as another element of the matter. The worker is really a subcontractor who is using your land and your tools. He is contributing his ability and his time to build these ships. If you take it from that angle, which is the angle the worker sees, you will find it easy to put yourself in his place, to understand him and to be understood. The first requisite is cooperation, the second one is a just appreciation of this. I don't think there is anything more important than getting the cooperation of the working people in this great project of building the ships. Put your cards on the table and let them know what this is for and let them know that it is to be done "on the level." I don't believe you will have any trouble in getting it done.

Mr. FERGUSON. This is a proposed telegram to Congress:

We are the representatives of 30 shipyards employing 50,000 men at present and need 100,000 more within the next six months. Individually and in competition with each other and with other employers on Government work we feel unable to secure enough men to carry out our shipbuilding schedules, and urge Government support and help by means of central labor employment agency, which we will use jointly. We therefore earnestly recommend that the item appropriating half a million dollars be retained in urgent deficiency bill.

Mr. BLOOMFIELD. I presume that is supposed to be a statement of the shipbuilders present at this conference. Are you in favor of adopting this statement, a copy of which we shall telegraph to the proper authorities? Are you willing to adopt this statement?

DELEGATE. May I suggest this be referred to a committee?

Mr. BLOOMFIELD. Is there any reason why this shouldn't go to the committee of five?

[It is agreed that this matter be referred to the committee of five.]

Mr. BLOOMFIELD. We now want to hear from the actual bureaus which have helped, as President Powell pointed out, helped directly in the working force. Mr. Burke, who is the superintendent of the Federal employment office, is here, and I will ask him for a statement about the organization of his office.

Mr. BURKE. Mr. President and gentlemen, I want to thank Mr. Bloomfield and the men for this opportunity to be present with you. We look upon your gathering as one which will be highly educational to us and of great profit to all concerned. We fully understand the great work you men are engaged in. We all understand a great autocratic power is trying to drive democracy from the world, and it is our wish to help you in this great work and to furnish you with all the men we can. Now, as I say, we thank you that we are here. I might give you a little résumé of our organization, the United States Labor Bureau. It is simply in an embryonic state; it is only about 4½ months old. We have had a little bureau in connection with the immigration office, and I have been

an inspector there 20 years, and my colleague here, Mr. Leonard, has been some 15 years. Therefore, we have had some experience in handling men and, in fact, we know about every business in New England, where it is and what it is, the classes and races of men that compose that district. For instance, you will find Lawrence is an Italian settlement. The Greeks settled in Lowell, and so on. It has been my fortune to represent the Government in various great strikes and troubles they have had in Ludlow, Lawrence, and such places. Therefore, we have been hand in hand with the men and know somewhat of what we speak. Now, I had charge of a little bureau down at the immigration office for two years past, but we gave about 90 per cent of our time to immigration and the other 10 per cent to employment. Apart from sending men to the West, where they call for twenty to thirty thousand men at a time to do the harvesting in Kansas and the Dakotas, we didn't do very much. We started in May and we have been running five or six hundred men a month. We have sent about 600 men to Fore River. They didn't have to stand in line.

Now, we wish to work with you heart and soul, and we will do our very best to send all the men that we can get to that place. I will say that there are but four of us there at present, but we hope to enlarge, and we are able to speak to the men and have a good working knowledge of about half a dozen languages, and that is something, of course, that comes to our knowledge from the Immigration Bureau. It is hard to select good, competent men, as has been said by a speaker before. There are a great many men who apply for jobs, but are not fit for the jobs, and we don't know what to do with them, but now there are a great many men coming from Pennsylvania and New York State, and we are getting very good material. We have them as far as from San Francisco; so the future looks good. I have been down to Fore River, and we were received very kindly by the men down there. I was very much pleased with the spirit shown there. It was "Hello, Mike," "Hello, Tom," and nobody had his head down when the boss came along. I have been head of a shoe factory; I have been president of the Massachusetts Labor Alliance; so that I have had some little experience in handling men.

I don't know whether you men are interested in wooden ships, but that comes within our work, too. Some months ago I was sent out to get the names of men interested in that work, and I met Mr. Storey, who told me his father was interested in that work some years ago. To-day if you want to find the wooden-ship builders, I am afraid you will have to go to the cemetery for them. We got about 600 men, but a great many of them are not ship carpenters, probably not more than 30 or 40 per cent. It is very hard to get wooden-ship carpenters. I was up in Manchester a few weeks ago. They expect to put on several thousand men, probably two or three thousand. It is going to be very

difficult to get them, and I would prefer to give the details of that matter to a conference of your own committee, so that you may know where they stand, but they are coming in every day looking for work, and the work is not ready yet; so when things are very favorable I don't think it is extremely difficult to get some workmen. There are a good many carpenters now looking for work, and I don't think it will be difficult to get some men at least. Down in Maine, Thomaston and other places, they are building some wooden ships.

I attended a convention in Washington some weeks ago, and we passed a resolution favoring this separation of the employment service from the Immigration Bureau. That should be done at once. I hope the appropriation will be made and that you will lend us your influence in setting apart the employment service as a service of itself, and you may rest assured that we will do everything we can do to help along this movement; that the men who are doing this work are doing a patriotic work as well as earning their living, and we pledge you to do everything in our power to get you all the men we possibly can to do this work.

Mr. BLOOMFIELD. We will now hear from Mr. Dunderdale, superintendent of the Boston free employment office, supported by the State.

Mr. DUNDERDALE. Mr. Chairman and gentlemen, the Boston office was established in 1906 as an experiment, and to-day we have merged from that experiment until it has become a vital necessity to the industrial life of this State. In the Boston office there are 14 clerks. The average attendance, which we take on the first day of the week, on Monday, averages from ten to fifteen hundred people every Monday. About one-fifth of that ten or fifteen hundred will be people who have called in the office more than once, but we have on an average, I should say, about a thousand individuals calling for work. The office is divided up into six sections, four for the men and two for the women. We have the men's unskilled, the men's skilled for draft, and the men's skilled for clerical and higher trades. Then we have the boys. Our office is on two floors. Upstairs we have the women's unskilled and the women's skilled. During last year we put to work 19,120 people. Unfortunately for us, the State doesn't make very large appropriations, and we are handicapped in that way. We can't advertise much on account of that appropriation. If the manufacturers will only advertise and tell us they will meet men in our office, we can do business in that way. After we had struggled along we didn't seem to be giving the proper number of people that they wanted. The employers were urging us to do our best, to do better than we had been doing, and I sent out the following circular:

TO ALL WORKERS:

Ships and war vessels must be produced at once if we are to win this war.

Our allies need men; they need food, clothing, and supplies; they need ammunition to make the world safe for democracy. But all this is useless without ships to carry them across.

We appeal to your patriotism, to your desire for freedom for yourself and your children, to your desire to help this country in its war.

If in any time of your career you have had experience in this work, or you have friends, think over the following very carefully. Our sons, brothers, and fathers have given up their occupations to rally to the defense of their country. We who remain at home must provide the means whereby they can carry out their noble purpose.

Think it over. How can you help?

The shipbuilding industry of Massachusetts needs men for work in the following trades among others:

Planer hands, 6-foot planers; vertical boring mill hands; horizontal boring mill hands; lathe hands, 60 inches and up; engine lathe hands (16-24-inch engines); milling machine hands; bench hands; riveters; holders on; coppersmiths; shipfitters; boiler-makers.

If you are not at present employed in a war industry, your services in the shipbuilding industry are wanted. We know your patriotism will urge you to answer this call in the interest of your country.

Any further information will be gladly furnished by the Boston Public Employment Office, 8 Kneeland Street; the Worcester Public Employment Office; or that in Springfield. Write or call in person and we will talk the matter over with you.

Yours for AMERICA, and all it stands for.

G. HARRY DUNDERDALE,
Superintendent.

I signed that statement, and we sent it out to a number of people, and it was well received; in fact, with the advertising the shipbuilders put in the papers we have had letters from all over New England and over as far as Chicago, people asking us the condition under which they can work, and we always refer them to the proper agencies where they want men. We found there were a number of men out of work, but they were married and they didn't want to leave Boston on account of the trouble that would be caused in moving. In our work we also have a bulletin which we send to the town and city clerks in every town and city within a radius of 30 miles of Boston, and this is placed in the city halls of all those places where the public can see it. It is a long list similar to what I have read to you with the names of all the crafts and trades men are wanted in. I can assure you that we are earnestly endeavoring to do our best to assist you, and the best way for any employer, if he wants any man, is to come himself or send his representative to the office, talk to the men, and take them away with him. If he relies on our sending out men, why, there is liable to occur what occurred with me about three weeks ago. A gentleman wanted in Lowell some 25 laborers. We sent him 28. He was paying 27½ cents an hour. We sent him 28 men; called him up the next day; not a soul had arrived; and I went downstairs and saw the clerk in that department. I says, "Mack, what is the matter here?" He says, "Go easy." I says, "What is the matter here?" He says, "We sent these men out, but the contractors have got their runners in the street, and as soon as they see an able-bodied man come out of here they say, 'What are you going to get?' He says, '27½ cents,' and they say, 'We will give you 30.'" So the best way to do is to come to our office and

talk with them, and if any of you want any men, come to our office and we will do the best we can for you.

Mr. BLOOMFIELD. Mr. Larkin will now speak to us. He is the employment and service manager of the Fore River Ship Corporation.

Mr. LARKIN. Gentlemen, I feel that the eyes of all the shipbuilders are on us on account of a lot of publicity we have gotten, whether it is due us or not, the fact we have been able in these extremely abnormal times to build up our working force in spite of the shortage of labor. I want to say that this problem was thrust upon us, to build 26 destroyers. The first thing we were confronted with and that troubled us was the labor situation. In talking it over we thought perhaps it would be well to enlist in our service the best man we could to advise us in our work, and naturally we settled upon Mr. Bloomfield, and he came to Fore River and spent some time there and acted in an advisory capacity, and with that as a start and the department we have already organized, the machinery we had in operation, we were able to go along and absorb the men as fast as they came. It has been my experience that the public, Federal, and State offices have been regarded more or less by manufacturers as furnishing other than mechanical help. In the past I think that the majority of manufacturers have thought that their principal function was to furnish farm labor and factory help. In spite of this, the company enlisted the services of the United States Federal Employment Service and the Boston State free employment service under the direction of Mr. Dunderdale and Mr. Burke, and they immediately got into line with a spirit of patriotism that is very gratifying. They immediately began to send us men, and I want to say I do not believe it would have been possible to have adopted any other method and to have gotten as satisfactory results for this reason. A man to-day is selected by experts in the bureaus. Their object is to maintain as efficient and as effective an employment service as they can. They have trained men who have spent perhaps all of their lives in interviewing men, and we have found the process of interviewing men from these bureaus is practically null. A man comes to us and presents a card as a riveter, as a ship-fitter in one of the shipbuilding trades, and we are almost positive he is going to be with us if he will accept our rates and our other requirements. To-day I would like to say that I think one of the principal functions of this conference is to get behind these agencies, to use them as manufacturers. Every locality, every big city, every industrial section should have one of these agencies to whom they might appeal for labor, and taking our experience as a basis I am sure that the results will be profitable.

Mr. Bloomfield spoke about our service department there, and while the getting of labor is a very, very difficult thing to do in these times, it is just as difficult to absorb labor and to hold them. We have been through the same experience everyone else has in having a very high

turn-over, up as high as 250 per cent, and that, about two years ago, was responsible for Mr. Powell giving it his personal attention and wanting to organize some centralized service and employment department, and with that idea in view a committee of workmen was selected from the plant and they were sent to the Middle West, sent to all the up-to-date manufacturers to study their employment problem. They did this, and as a result came back and presented recommendations to the president. This report was sent to all the men handling men in the plant, and they commented on it, and their comments formed the basis for our future policies. Immediately there was a building built, the hospital, the welfare activities of all the educational work, and of all the employment work was centralized in one building. After we got this centralized we found it was indispensable, that all these things belonged in one place and they were all very closely connected with each other, and I think to-day if we are not having a turn-over it is responsible in a great degree to the large amount of missionary work we have done in the last two years in getting our men to a point where they have faith in the organization, where they realize there is a central bureau they may appeal to if they have a grievance, where there is machinery to handle these grievances, and all sorts of activities for their benefit are being carried on. This service department deals with all these activities, and we have men trained in their special lines to handle these activities, and just to show you the work that is being handled there, one day about a month ago we had 700 men in that bureau for different reasons—about 400 on employment, about 150 that were being treated for accidents and having redressings on past accidents, and others that were having grievances. Now, one thing that has been established is a system of transfer, so that any man in the plant getting through in one department may go to this bureau and ask for a transfer to another shop. If he finds he doesn't fit in one machine shop and he thinks he will fit in another shop, we will try him there, and the foremen have cooperated with us in a very satisfactory way. We have found they have been very anxious to do everything they could to help us, and that seems to be the spirit that prevails with the whole organization.

Now, another thing I think you gentlemen will be interested in is the system of reports which should be made to the managers of the plants. We know the manager of a plant has probably a daily report on his desk of shipments of materials. He knows how the material is moving from the rolling mill to his plant; he knows at all times the status of financial conditions through the reports his treasurer submits to him, but he doesn't know anything about the labor. Now, it can be simplified so that every manager can have on his desk every morning just the trend of his labor in the plant, and we have just a simple sheet, a daily log we call it, of employment. On one side of the sheet is the number of men hired, and that is divided into skilled and unskilled, and in a corresponding column

the number of men leaving, so that the manager can look to-morrow morning and see what the tendency of labor was for to-day. At the end of the month we make a labor analysis and we show the reasons for the men leaving, and it is possible through this labor analysis to almost tell what is going to happen two months from now. The way we get this information is, we have made it a rule that any man leaving our plant before he can get his money must pass through the employment agent and tell him the reason for his leaving, and this has worked wonders in getting men to take another job in some other part of the plant, thereby cutting down the turnover. The first thing, I think, to do is to instill into the man who has charge of the labor work the idea that he is dealing with so many men that whether the man is a mechanic, whether he is a semiskilled man, or whether he is an untrained man he should receive the same consideration, and we have tried to carry out that policy to the limit in our plant, and I think that it has a good effect generally. I think the advertising that a company gets out of handling the men in that way and treating them in that way is well worth while.

About the training of our men: Some years ago there was an apprenticeship course started in the plant. A school was started there for the training of apprentices, and the outgrowth of that is that to-day, in addition to apprentices, we have several courses of which you will hear this afternoon from the teachers who are working in that branch of the work. But one interesting thing that was done there (and not by any educational work but rather by a foreman himself, the head of a department) was to institute a riveting school, and in this school they were able in a very short space of time to increase the number of gangs of riveters, which is a very vital part of shipbuilding work, from 75 to 130. All the time these men were being trained they were doing productive work. In addition to that we have a ship carpenter's training class that is being conducted by a man trained in the work, and four others in the machine shop. I don't know whether you gentlemen would be interested in the plan of an office—taking the office that we have, the service department that we have, and eliminating all the mistakes we made in planning it and taking a new layout which has just been prepared—if you are, to-morrow afternoon when you come down to the works I shall be very glad to show you a new layout which we think is ideal. You may be able to find a number of flaws in it, but you may be able to get some good points from it.

DELEGATE. I should like to hear a little more about the way you trained those riveters.

MR. LARKIN. We took a section of our plant and put up the skids, which was the start, and then took some submarine plates and put these men to work. There was a skilled riveter to train these men. This man took, I think, 12 gangs to start with, and the men were taken in from the

employment department and put on to riveting. They were kept there, I think the average length of time was from a month to six weeks just doing snap riveting work, and gradually as they progressed they were put on the ships. I don't know as there was any special plan. However, if you would like to hear the details of this, Mr. Frick, who was the head of our structural steelwork at that time, is here and he can tell you.

Mr. FRICK. That whole proposition as we worked it out was rather crude in spots, but about a year ago we had 80 gangs of riveters. I think our average per week was running around 90,000, and that didn't half meet the plan; but we had a pretty good supply of labor. Due to the energy displayed by Mr. Larkin and various employment agencies you have heard about, the men came in pretty fast and these men—we just took a leading man riveter (we tried out two or three before we got one that was pretty good) and we took various motor type frames and floors and spread them out on skids, and we turned these gangs over to the leading man and when we got more than he could handle we put on another leading man, and after they learned how to drive water-tight boards, that is ordinary snap work, we took these fellows and showed them how to flush up rivets. They battered up the plates pretty badly at first, but we kept them on that two or three days. Then we would put them on some part of the ship, down below for example, make a bulkhead in the hold, and we got men there who turned out pretty good work, and it wasn't very long before we had men who could put on the shelves. Mr. Larkin said we built up to 130 gangs. As a matter of fact, we built up to 175 gangs by the 1st of August. Now, of course, our costs ran up, ran up pretty high, because you had to hire these men at a day's rate and pay them a pretty good rate. We had to in order to get them in there, and it took some little time before those men could work to any scale. We found on straight work that in three months' time a good many of them could take a scale and work to it. As a whole, our results were very successful. We did the same thing with calkers. We had a leading man to turn them over to. We made calkers in three months. We laid down a body plan amidships, section of a boat we had under construction. We took some of the plans of that boat; then we would take a new plan and we would teach him to lay a foundation up there on the floor, and he would make his molds from that, then take his molds and take them out on the ship and do the actual work and see how it looked. Well, it doesn't take an intelligent mechanic very long to do certain things. Of course, we can't expect to develop a good all-around shipbuilder in three months, that is out of the question, but you can develop a man who will specialize on a certain thing, and that was the line we pursued in our work. I don't know as there is anything else I can tell.

Mr. BLOOMFIELD. Mr. McNary is in charge of the Emergency Fleet Corporation's next move. Mr. McNary has one of the outstanding jobs at this time.

Mr. McNARY. Mr. Bloomfield and gentlemen, I take it that the gentlemen representing the Labor Department are Exhibit A and now you are going to have Exhibit B. I have been for the last two weeks visiting yards. I haven't seen any that didn't have training. Exhibit B consists of reports of the training department in Quincy connected with the Quincy Industrial School, cooperating with the Fore River Shipbuilding Co. Mr. Spofford, who is the director of the Quincy School and hasn't taken a vacation this summer, has been directing the work in the Fore River Shipbuilding Co. I am going first to ask Mr. Spofford to give a brief outline of how that work has been going on there this summer.

Mr. SPOFFORD. Early in June the Quincy Industrial School offered to Fore River the cooperation of the school and its faculty in doing anything possible to train, or partially train, mechanics, apprentices, and new men to assist in the production. About the 18th of June we had a conference at Fore River and it was decided that as soon as the day schools closed we should start work in training machinists, especially fitters and shipwrights. Thereupon I started to see who I could find for instructors to handle this work. I had four instructors in the Quincy school that had had considerable shipyard experience. Therefore, we selected those four men to take up the work and then I got one man from the Boston Vocational School and one man from the Newton Vocational School who had had some shop training in the Fore River plant to join the force. On the 1st of July we started three men in machine work and one man in ship fitting and one man in shipwrighting. In the machine shop two of the men handled the day work and the classes were made up of from 1 to 12 men. One of the machine men handled the night work. In the ship fitting we put on two men because there had been no definite course laid out, and the instructors would have to feel their way more or less. In the ship-fitting class we had 15 men to instruct—five men from the ship-fitting department and five men from the steel mill and five men sent from the employment department, new men. That would make up one week's class. The following week the men that were instructed were to go to the shop, and then another division made up in the same way were to take up the school work, that making a basis of education. The shipwrighting we started in with six men and gradually grew to 13 during the summer months. In having a school which is State aided like the Quincy Industrial School we had to comply with the State laws, that is, that all of our work must be carried on on the basis of instruction.

Of course, that involved production as well as instruction, especially in the machine shop, as the foremen in the machine shop had got to get out their production. We carried that on as well as we could, and the State agent was down to inspect us once a week during the summer months, so as to see that we complied with the State laws. I will say that we have had very good success in the machine work. One of the foremen told me only last week that he was getting 50 per cent more

production at night through having an instructor there than he was before with the same number of men. When the school opened in September the school committee felt it desirable to bring back all of the instructors whom they had elected for another year in the day school on to their day school work. That put rather a difficult situation up before me in order to get men who were capable of teaching and who knew the trades. I got busy, however, and got enough machine men to do the teaching there, and was very fortunate in getting the men I got, so that there was no delay in the machine shop. There was a delay of a day and a half in the ship fitting, but we were fortunate in getting a practical ship fitter who has had years of experience in the ship-fitting trade. He is now handling that class and he is doing very good work. I expect him to be here later this afternoon, so he will be able to explain it. The shipwrighting was delayed for about a week and a half before we could get a man to handle that work. We have, however, been able to get a man who has had considerable experience in the shipyards and where the shipwrighting is principally in connection with the submarines. This man we got has had similar work during the past two years in making model submarines in an adjacent building, where they assemble all these pipe fittings and that sort of thing on this model.

The number of men we have had under instruction is 141 and divided into classes of 10 and 12 in the machine shop, and there are about 18 in each division of the ship fitting, and there will be 13 in the shipwrighting as soon as this new man has got acquainted with the job so we can carry a larger number of men. The foreman in the shipwrighting department told me Friday that of the 13 men whom we had under instruction last summer that he had 6 men that he could put on their own resources to handle the work. The other seven men came in later in the summer, during the month of August, and of course had not had sufficient training to do that work. The average length of time for a man who has had mechanical experience to complete the ship-fitting trade so he can go out on the job would be approximately four weeks. We had one man that had had a great deal of experience in laying out work in the granite quarries and was thoroughly used to blue prints and all that sort of thing. He was sent out at the end of two weeks. All these men in the ship-fitting trade are hired in at the rate of 27 cents an hour. As soon as they complete the work in the classes they are related to 28 cents an hour, and then they advance in accordance with their efficiency on the job.

DELEGATE. I would like to ask Mr. Spofford if that man that worked in the granite quarries, whether you kept that man in the school the two weeks?

Mr. SPOFFORD. No; he was in the shop one week. He was in the school two weeks. He was in the yard three weeks before he went out.

Mr. McNARY. You have heard a director of an industrial school that has cooperated with the shipbuilding problem. I am going to show

you some real live instructors in shipyard work. These instructors are working in the Fore River Shipbuilding Co. doing their part. You have instructors doing their part in your yards. You are going to need a lot more of them. We are going to train a lot more of them. I am going to ask Mr. E. P. Barrows, who is a trained ship carpenter and an instructor, to give us a brief outline of his work.

Mr. BARROWS. At the present time it is rather difficult to find mechanics who are sufficiently skilled in the general line of shipbuilding. The general line of a ship carpenter, as you know, is that he is responsible for the form of a ship. His work consists of carrying up a ship, laying the keels, running the rib bands, and he is responsible at all times for the fair condition and form of the ship. The necessity of ships at the present time is so great it has become absolutely essential to train men in this work, and that is the work I was engaged in at Fore River. The necessity of production was so essential it became necessary to train men in productive work, and my experience leads me to believe that is the best way to train these men. I had under my charge anywhere from 6 to 13 men actually engaged in ship-carpenter work on these ships. Part of these men were engaged in checking up frames as they came from the hands of the ship fitters before they were riveted, and in order to do that intelligently it was necessary for them to be able to read blue prints, and the way I endeavored to train them to read blue prints was to show them the blue prints and point out line by line as they were represented on the print. By and by they began to be able to do it themselves. Our checking, of course, was all done from the loft floor. A foreman or master went over to the floor and obtained the various measurements it was necessary to have in order to check those frames. I want to say my work was altogether on submarines. Then I had to teach these men the exact points to apply these patterns in order to see that the frame was according to the drawing. In order to do that, several things were necessary. It was necessary they should read prints in order to see whether that frame was cut at the top or whether it went into the ship as a whole and remained as a whole, and consequently would have to be a more accurate job.

Now, as I say, it is absolutely necessary with us that this work be done on productive work on the ship. The foreman ship fitter had charge at that time of two ships and was beginning to lay the keels for eight more, and his time was entirely taken up, so he had absolutely no time to apply to the men themselves. My job was to run around to the various men on the jobs they were at, assist them, see they were doing the work in the proper manner, show them how the work should be done properly, check the job, and read the prints. Now, the requirements of an instructor are various. In the first place, he should have a general knowledge of ship construction in general, a broad knowledge of ship construction. He should have a special knowledge of the job he is attempting to instruct in. He should have the ability to get along with the

men and the foreman. He should cut out entirely the idea that he is trying to instruct them; he must be sort of an assistant foreman working with them. He differs from the assistant foreman in that he is not responsible for the work. The whole success that I had, if I had any, was in chasing up each man, and if he needed assistance in any particular way give it to him, go over the print with him, assist him to read the print, make him read the print to me until I was thoroughly convinced he was capable of doing the job, and from that time watching him to see he did the job properly. There are several ways in which we can assist the foreman other than in direct teaching, by suggesting to him speedier or other methods of doing the work. If a foreman is at all touchy, you see, you are up against it; you must not force your ideas upon him; but if you have an idea that you think will work out properly, give it to him in such a form that he can understand it without having to study a week over it. If it seems good to him, try it out. If it doesn't, don't argue about it—that is, suppress your own ideas for the benefit of the job. There was simply one suggestion of this sort, which I will not attempt to detail to you, that has been accepted and has saved them a large amount of time and has been generally adopted throughout the yard. But other things I thought of I kept to myself until I thought they would be of some earthly use. What I want to get at is not to strain yourself to get ideas. If they come naturally to you, use them. The class of men I had under my instruction, it was necessary to evolve some method of mental calculation for them. One thing I did was to add fractions with a rule. It is a simple proposition. You take your rule, measure one fraction, stick your thumb out and measure another one, and keep on until you get it done. There are a good many things a man may do to their advantage in addition to instructing the men in their trade. I found that a man who learned to read a print of this particular job, after two or three jobs he has sufficient confidence, he has obtained sufficient knowledge of a print so that a new print he can pick up and read it himself, and all the time you are trotting around to see that he doesn't read it backward. Now, gentlemen, that is what I endeavored to do at Fore River.

Mr. McNARY. Mr. E. A. Winter is not only experienced in his trade, but he is experienced in teaching in industrial schools besides teaching in the Fore River school, where he is now employed.

Mr. WINTER. Mr. Chairman and gentleman, I have divided up my little talk here in about three parts—types of boys, kinds of instruction, and cooperation of the foreman. In the first place, the type of boy who is in a machine shop as an apprentice isn't any different than when I was in there, and in a good many cases I think he is brighter than when I was there. The type of boy, I think, at the Fore River school has passed through the eighth grade of the public schools, and I have been able to find only one exception where a boy thought he didn't

like to work. I had one little fellow who has resigned and gone out to endeavor to do something else for his country in some other line of work, and the day before leaving I asked him what he was leaving for, and he said, "Well, I never liked to work anyway," and I said, "Well, the quicker you get out, then, the better." But their averages for the past month are under 21 years of age. They are all over 16 and under 21. They are boys of different types, all English-speaking boys, and they are willing to listen if you go at them the right way, and they all have ideas of their own, and I have found they are more willing to take hold of an idea if you give it to them in the right way. They like to be dealt with in a nice way, taking the boy's standpoint of the situation. They are there under shop conditions, all of them being paid, and there is a bonus system attached to their pay, so if they do spurt up and meet a certain production they get paid for it. It was only last Saturday I had a boy say to me, "On the job last week I made \$2.80 over my regular pay." I said, "That's good, John; I am glad you did." I find the boys are willing to take hold with the instructor and go ahead as he instructs them, but occasionally you will find a boy, perhaps, along around 5 o'clock getting tired, as growing boys do, but take them in the right way they are willing to take hold in good shape.

Now, the instruction I would give them is what we call in a school "individual instruction." The boys placed on this machine and that machine puts the instructor where he can not give group instruction or class instruction. It has to be individual instruction. The first thing I have a boy do is to take the blue print, and after he has located on that print the particular part he is to machine I allow that boy, as far as he can from his past experience, to go over it and give the operations that are necessary to machine that piece of work; but I follow very closely, and after he has enumerated them, if he has omitted a danger point or has eliminated anything, then I go over with the boy the different operations as I have seen them and as they appear to me practicable. I go over it with the boy and enumerate the different operations, and if the boy hasn't been able from his past experience to grasp this particular type of work, I say, "Now, John, on your last job you did thus and so; now, here is a little danger point; if you don't start this job right, you are likely to get in trouble in the end," and I find the boy goes ahead in good shape. I don't often—if a boy has a piece to machine I don't endeavor on the first piece of work to put the boy up to the production point. I let him grasp firmly the different operations, but I always endeavor to guard the boy against false motion. I find a boy may in his early training in the shop get hold of certain ways of manipulating a certain chuck on a drill press which may be awkward. I guard as much as I can against that after the boy has got fairly well in his mind the different operations of that piece. I say, "Now, John, let me show you how I would put in one of those; let me show you my way." I get the boy as early as I can out

of the way of false motion. They are not only dangerous in operation, but they take up time. Then, again, the production line. I might say to a boy, as I had occasion to only yesterday, "How long did it take you to do that?" "About so long." "Well, let's see what you can do on the next one." The boy takes that up in good shape. I find that more of the instructor's time is used up in training the boy as to the selection of the proper tools and how to grind them than it is in the manipulation of the machine. Some of the young men I have with me there have been in the Fore River shop over two years—not in this particular department. The longest anyone has been in the department where I am is a little over two months. They would be perhaps on the drill presses; they are now up in the lathe department, and I find they are more apt to grow careless in the proper grinding and setting of the tools than they are in the operations of the machines. That is a thing I have to guard against very much—to show the boy a better product, that a better article may be produced if a boy properly grinds the tools.

I also find that on the milling machines a boy is apt to get careless in the selection of his cutter—the proper cutter for doing a certain job—but my past experience has been that you can convince the boy of hard facts if you get the boy to thinking for himself. I never do for a boy what he can do for himself. Boys are very apt to like to have you do that, but if you say, "Now, here, John, I am going to help you to do this, but I want you to do it," and John will take hold and do it with a much better spirit and will get better results. At present I have six on the lathes. Another point I find on milling machines and boring machines is the time the boy may consume in rigging up his work, getting it ready to machine. There, again, you get the false motion, improper method of strapping, and things of that kind. All the time I am holding the boy down to his blue print; that that is the picture which he is to follow. This past month has been my first experience in shipyard machine shops. I am a firm believer that right on the work in the shipyards is the place to train the boy. There is some difference in training a boy in the shipyard from training him in an industrial school. I find the shipyard drawings are in some respects a different type; that is, their standards of measurement, their methods of doing work, of illustration. Lots of ship work, as you know, is galvanized after it is finished. Therefore, the boy has to have, I find, a training along that line in regard to his measurements and in regard to his finish which would not come in in a factory where grinding and other work is not followed up after the milling is done.

Now, in regard to the foremen, I have had no difficulty whatever. I find the foremen are very willing and they have turned over these young men to me as they came along, and in going to the foremen I have had no difficulty in getting the right kind of work for these young men, what they need. At the present time, at the Fore River, we have a

great variety of work where these young men can get instruction. Take it on the milling machine, there is a great variety of work. I have a young man who to-morrow is going to be transferred to another department. He has been on the miller, and I find he handles the different parts of work there in good time. His movements are mechanical; he is very careful in setting his different types of cutters. I can't see but that he is just as careful as a journeyman and he takes pride himself in being able to do that kind of work. The foremen have cooperated with me in every respect. They have a vast amount of work to do. I can appreciate that, having served as a foreman a number of years. I know a foreman doesn't have the time to give to the boys the minor details that are necessary for him to develop.

Mr. McNARY. Mr. Tomlinson is an experienced ship fitter. I understand he learned his trade by the long and painful process and is now serving his country by training some young men in ship fitting. I visited that work Saturday, and it is worth seeing what he is doing over there.

Mr. TOMLINSON. Mr. Chairman and gentlemen, my duty in Fore River is training young men in ship fitting, and in that duty I have taken a course. The first part that is necessary to teach those men is geometry. Then, from that I proceed with the lines of the ship, taking the body line and teaching those men how to put them down on the floor so that we can strike in the plane, and everything that is required. Now, that is somewhat difficult. There are some that are absolutely new to the blue prints, and the most difficult part with them is to train them in the reading of those drawings correctly. After they see through that point and I can make it plain to them that they can find the lines at center on the floor, the next duty is to get them to lay down the various parts of the ship, to make the molds there to go into the steel mill. I take them in pairs—let them help in pairs, so they can help one another out. That is required, so that each can take an end of the chalk line. The instruction, then, after they get the lines down, is to get them to lay exactly as the drawings, so that when they have made the molds the most essential part to drive into those boys is the placing of the mold so that the job can be assembled perfectly. From that I take them on to the shelves, the sides, etc. Then we turn to foundations—boiler foundations, engine foundations, and the auxiliary foundations. That is somewhat easy to them; after they get familiar with the blue prints and putting the lines on the floor, it is only a matter of making their molds. Then I have to instruct them in the method of lifting molds from the ship, which is somewhat difficult. In that process I teach them the way to apply their patterns for different flanges of the angle, staple bolts, shoes, etc., and the method of marking those molds up for checking one with another, so that they will get their flanges and bolts correct on both sides; and that is somewhat difficult, as it is hard to make them understand that one has to coincide with another.

That is the main part, and the trouble, which is overcome after a little explanation, is offsets. It seems hard for them to understand how to mark up molds for offsets. Then I impress upon them that they must see the job absolutely finished from the drawing before ever they make a start. All jobs that I have them do on the loft, I take every little thing in detail; every small mold that is required for the job is placed together. After they have it all I have them assemble everything on the loft floor by tacking it together, and the job is absolutely held up by molds. Then they see the operation from beginning to end. Now, I have had some good success with those men. I have been instructor one month. Of course, there was an instructor previous to me, and in that one month I have transferred six men into the yard. When transferring those I find which leading man or foreman he has been sent to, and I send a note to him asking him to give them as much show as possible. Then, each week I see that leading man or foreman to see what progress they have made, and some are making fine progress. They started in the school at 22 cents per hour, went into the yard at 28 cents per hour, and at present some of those men are receiving 40 cents per hour. So, gentlemen, you can see they are progressing, for they don't pay 40 cents an hour for 22-cents-an-hour work. So every week now I go to those foremen and make sure these men are getting along, and I am quite pleased with the results that have been obtained up to the present, and also in the instruction they get, the development of all-round types, bow and stern, and everything that is required. Among those men I have received there are, of course, some dull ones. That is to be expected. But there are some very bright ones, and the trouble with the bright ones is they have been familiar with blue prints on some other work, on structural work, and the main thing is to get them to understand that ship work is not structural work. At times they want to show me how it ought to be done in structural work instead of ship work. They can't understand why there have to be so many corners, why it can't be made square; but I am very much pleased with the work done down at Fore River.

Mr. McNARY. I just want to call attention to the fact that the work given by these instructors has brought out these points: First, that the best place to train men in ship work is in the shipyard. Second, that whoever is giving instruction, if instruction is his sole duty, that he ought not to be charged with getting out production as well as with instruction. If we accept the testimony of these men, it is a successful proposition to have instructors take men, give them short intensive training, and place them out in the yard where they can do the jobs. It has been proven by the efforts in these different yards that this can be done.

Now, we have had a description of the work that has been going on in Fore River yard. I want to take up for just a short while the program

of this department in organizing training. I have spent the last two weeks in going about visiting the yards, and I want to give you the impression I have had in talking with yard managers. In the first place, every yard manager I have met has put up this notion to me. He said, "So far as the interests of this yard are concerned, that has gone by the board anyway; what we want to do now is to build ships. We have got to build ships, and we are going to build ships." That is the spirit I find first, and I find that is based absolutely on a spirit of patriotism. These yards are being run by American citizens. Now what I think is needed, you want more American citizens to come into your yards and help build your ships. Some of you tell me that isn't the situation you have now. You are up against some pretty serious difficulties in getting the help that is interested in getting the ships built. Now, then, if you are going to induct into the yards the number of men that are needed, say 150,000, that you are going to need in the next six months, you have a tremendous training problem on your hands. I congratulate myself I haven't got the job of getting the men, and I hope when you get the men they will be men who have at heart the building of the ships. I have been talking with men, and they say, "If the United States would say to me I need to go down to a shipyard and learn how to drive rivets I will give up my job and go." I think we have been dealing along the lines of business as conducted in the past, and now you are up against a war situation, and when it is put up as a war situation to these people I know you are going to get them.

If you are going to train men in the yards, the only people in the world who can do it are the men who have had experience in the yards. It is no proposition to get school-teachers in and teach them how to build ships. You have got to have men who know how. In the second place, do these men who know their trade all know how to give instructions? This isn't a boy proposition; you have got to get men up against hard physical work that boys can't stand. You have got to take men and give them a short, intensive training. You have got to take skilled men in the yard and have them give instruction to other men who don't know the work. There is a group of men that know how to do this, to sit down with a man that knows his trade, show him how to analyze that trade out in terms of training so that he can utilize that knowledge, put it in proper terms for instruction, show that man how to put that over as proper instruction. You can do that, and then let this man go out in the yards and give that training. How is that going to be accomplished? There is a very small number of men who can take their knowledge and use it in this way. The proposition is this: In some central yard that has large facilities, ample equipment, plenty of room, to bring together a group of men selected by the yards. Now, for instance, in your plant, you would be invited to select from your yard some of your best mechanics that you would select as prospective instructors. They would

be sent to some central yard that has yet to be selected, and there they would receive a short, intensive course of training in the yard in giving instructions. They would then come back to your yard and form the nucleus of your training staff. That, in rough, is the way to get this thing started. If you can take 150 men and give them that training in six weeks, as we know you can, and keep that up until the fiscal year in July, you will have trained 900 instructors. Now, each instructor can handle from 10 to 15 men at a time, and in a year it will be possible to train 75,000 men by that method. You will always want instructors; every week you will be turning out these instructors.

Now, then, I want to speak of some of the details that will come up in connection with that sort of problem. It means, if you are going to give training, you need a training department in your yard that ought to be considered entirely separate from your production department. One difficulty has been in putting over the industrial training of any industry that it has been put up to people first to get out production and then do as much instructing as possible in the remaining time, and instructing has gone by the board. The only thing to do is to have a separate instructing department. That would mean that in your yard you would need instructors. One man would be your training director. Now, if you have a training department how are you going to carry on training and not interfere with production and yet get production out? Your production foreman has got to make good. I find in some of your departments you are organized just as all the large businesses are. Each department must make its own way, must make its department pay. I think you have got to have a training department that is independent in its accounting, but you can not train men on make-believe work, as has been pointed out by these men. You have got to train them on actual work. Your production foreman will turn over to the instruction department work that can be used in training the men. When a man has gone through that training experience, he is turned over then to the production department; until that time he belongs to the training department of a yard. There are a great many problems that will come up in getting that thing over. The only way I know of to handle that is this: That the corporation will have a specific program to put up to you; submit those things to you for discussion, and get these things going as fast as possible. There are so many things that you will bring up, so many have brought up already, as to what must be done before the training can be started. I agree with you that those problems must be met before we can put those things over successfully, but we believe we have a program that can be carried out, and before you are asked to go into it those things are going to be thrashed out and a very definite line of action put up to you.

Of course, this work is expensive; it costs money. You will raise the question right away, How is it going to be reimbursed? There is no doubt that the way we have been training help has been pretty ex-

pensive. I hope we can get some figures, after we have had some experience, as to what it costs with an organized effort to train as against what it costs with an unorganized effort, but in any event we are going ahead to try to meet this problem in this way, and this suggestion I put up this afternoon is to get this thing started.

Mr. CONNORS. In regard to that expense, besides the expense of a department of training, does this new department in a shipyard increase the expense?

Mr. McNARY. There is this burden of picking out these prospective instructors—paying their wages while they are being trained. It is a matter of investing on the theory that you are going to get it back after they are trained.

DELEGATE. Is it the idea to have the shipbuilders bear this expense while it is going on?

Mr. McNARY. That whole thing has got to be put up in a definite form by the corporation before we go ahead with it. I am not in a position to give you the specific answer you want, but you are going to get it before you go ahead.

Mr. BLOOMFIELD. I think, in this connection, as the Navy Department is a very big partner in this enterprise—I think we ought to hear from two of the gentlemen connected with the navy-yard work in our neighborhood. I would like to ask Mr. Litchfield if he will tell us something about his work?

Mr. LITCHFIELD. Mr. Chairman and gentlemen, I am rather surprised that I should be asked to say anything. In fact, I am not prepared to deliver an address. I can simply state some things we have to contend with. As you may all know, all mechanics in the Government stations are handled by the civil service; and, by the way, there has been no mention made of the civil service. In fact, however, since May of the present year we have increased our force at the Boston Navy Yard from something over 2,000 to approximately 7,000 men through the unaided efforts of our little office over there in the yard. The results, however, as these figures I have just given you will prove, are not altogether to be despised. We had the same difficulty that all manufacturing concerns have in this particular line of work in getting men in specialized trades. I refer particularly to ship fitters and the different branches of the ship-fitting business. Fortunately, in this locality we have an exceptional field to draw upon, and in all the mechanical trades we always have a surplus of applicants that we can call in at any time on very short notice. The matter of instruction is being taken up, and we have a representative of the Boston vocational schools here this afternoon who is handling the matter of instruction for our boys and apprentices, and also other helpers in trades.

The matter of protection against infringing on the rights of independent manufacturing concerns is covered at present by an Executive order of

the President issued several months ago. We are not allowed to take on a man who is engaged or who has been working for any concern on Government contracts within three months of the time of calling him unless we get a written release from that concern. Of course, a man lies to us sometimes, and we have no other information except what he gives us, but in most cases we are able to protect the manufacturer. And while sometimes it makes hard feelings among the men, it works out satisfactorily usually to the men and to the Government.

I don't know that I can say much more to you than that our system up to the present time has been adequate for our needs, and at the present time I have on my list in the yard thousands of men that I can call in on a day's notice. Of course, we get, as a general rule, about 50 per cent of the men we call. It depends upon the character of the work involved and the frequency with which we have been making calls. Take the matter of carpenters. I presume I have 600 men available that I can call on short notice. We would get not more than 50 per cent of those men because they have been on the list a long time and have taken positions elsewhere. The only information we have is the statement the man makes himself and the statements from previous employers and vouchers. As a rule this is very satisfactory. Of course, we put a man on a test when he comes to the yard, and if he falls short of our requirements he isn't hired.

As I say, I am practically unprepared to give you a long address on this subject, but if there is anything you would like to ask me I shall be glad to answer.

DELEGATE. Will you state that agreement of protection once more?

MR. LITCHFIELD. The President of the United States and the Civil Service Commission have an agreement that no man at present employed by a concern on Government contracts, doing Government contract work, or who has been employed within three months, shall be employed at a Government station unless he presents a written release from that company.

MR. TUKEY. Gentlemen, I came over here more to receive to-day than to give. I have been on the job at the navy yard since about July 23. Previous to my starting, the lieutenant commander outlined the situation very roughly to me, in that they were shy of really first-class mechanics; that they had many men they wanted to improve; also they wanted to increase the number of mechanics. My instruction was, "Go to it." I started in. The first week or so about all I did was to get acquainted with the yard, and I think Thursday of the week I started there was a condition in the anglesmith shop that required that we train some helpers. We had several anglesmiths there. My first problem was to outline a course of instruction for anglesmiths' helpers. They delegated a man to me as an instructor that was a former blacksmith and I should judge somewhere between 65 and 70 years of age. Now, you can't make

a blacksmith into an anglesmith instructor; that is, into an instructor of anglesmiths. He doesn't know enough about anglesmiths to know that an anglesmith has got to be able not only to strike sidewise, but be able to strike left hand and right hand stroke. He has practically got to be able to stand on his head and strike. So my problem was to take some of the men and make anglesmiths out of them. For quite a period I had considerable trouble in getting men who would undertake that instruction.

Incidentally, the first week of August wasn't a very cool week, in fact, it was the hottest one we had had, and I had the problem of breaking in men who had done nothing but handle a broom around the yard. I had my knocks and bumps in that anglesmith proposition, believe me, but as a result of it I succeeded in getting four new helpers. Just about the time I got the thing going where I wanted it, I got another instructor, who had been an excellent striker. Just about the time I got him working under full steam they changed over the shop, and it took a couple of weeks to carry that through, so about the time they got that straightened out the shop was in such a condition, the shop was so full of work they took my man I had for an instructor; they had to put him back in the shop. Now, I relate that experience just for this purpose: I realize that production had to be maintained, but I think if it had been possible, in the first place, to hold the other anglesmith we had there and let me keep that man I could have produced good results in that department. The gentleman I had for an instructor in the anglesmith shop in the first place was an elderly man, and he wouldn't take ideas as well as the younger man did. I had several experiences with this man. I would tell this fellow to do this thing and the other thing, but somehow he doesn't seem to get on now. Telling him isn't teaching. That is one of the difficulties I had with this man to break him in as a teacher.

Now, you are not particularly interested in teaching problems. You are interested to know what average did I get from the number of men I took in for anglesmith instruction. It averaged one out of every three men, that is, for every three men I took in I could get one good helper. Now, that was purely manual instruction. I took my man I had for an instructor and had some pictures taken of him in the various motions of swinging a hammer, and I used those somewhat in classroom work, and it worked out first-rate.

Now, what am I doing at the present time? I have at the present time about 56 ship fitters and in addition to that I have 38 apprentices. Now, those 56 ship fitters—I have one first-class ship fitter; second class, down to fifth class, two ship smiths; and now I have made a dividing line there, so that there are two different departments. One is the mechanical, which is entirely supplemental instruction; one the apprentice, a type of instruction which must be a complete instruction with my ship smiths. I have him in the shop for five hours a week. I

divide those five hours up into two periods; that is, for the first couple of hours the men come to me I give him what I can of the technical nature of his job. I say technical—it is just ordinary grammar-school work. These men have been out of school for 18 or 19 years. If you are going to give them anything later on in mathematics, they have got to be prepared in that. In addition to that, I am giving them a little of what you might call descriptive geometry as they strike it on the job, simply to help them in layouts in the making of drawings, making sketches from drawings. You give a man a blue print and tell him to make a drawing of what he sees in that blue print. You would be surprised to see what he gets out of that blue print. I am improving him in that particular part of it so that on his job he can make some kind of a sketch. In addition to that—quite frequently they have to send a broken part or a part that is bent up to the shop to be straightened. Part of what they have to do is to make a sketch of what they want that thing to look like when it is sent back. The Government very kindly provided me with a mold-loft space there, which is about 30 feet long, and on that space I planned this: I am at the present time having the ship mechanics, fitters and helpers, take drawings and go out there and lay them down on the floor, but I tell you frankly it has been a guess proposition, that is, with the help of others I made a guess of what a fourth-class fitter was capable of doing, and I got some drawings of that class. I also called in the services of a first-class officer, he being the only man I could get for an instructor. What I have him do is follow the work that is done on the loft floor. Now this instructor, the only one I have at the present time, I am using as an instructor on that mold-loft floor. Incidentally, I am going to try to work him in on the small boat workers later on.

I don't want to go into the details of what I think should be laid out for apprentices in ship-fitting work, we will say. I think this at the present time: I got hold of one of the apprentices we have there and I found out he put in about the first couple of months of his training there in the tool room, and they kept him there until some one thought he should be taken out, not on account of his knowledge but because he put up a howl to be taken out. Now, what he wants according to him, is a continuation of that training, whereby he is to be with a first-class fitter or a first-class mechanic and work with him all the time; but he doesn't get it. He is what he calls "out on his own hook," where he picks up what he can. I think that boy should be located in the tool room for the first two months. Then he should be put on the ship with a first-class fitter. Then he should come back and be put in the shop and work through the inside shop operations. That would occupy about 15 months, I think. After that he should be put out on the mold loft and get some experience there and have some experience on the blocks. That will occupy about three years. His last year should be one month in the shop and one on the

ship. In addition to that he should have each year one month in the draft room.

Now, you want to know further what results I have got. Generally speaking, I can't check up my results very well. I did have these checked up last Saturday night, and was informed that nine ship-fitters' helpers had been raised to ship fitters. I can't lay claim to all that, but I can to some. I know I produced the four anglesmith fitters. I think one method of increasing ship production is the making of better mechanics. I am not doing at the present time just what I want to do. My general plan when I came here was just what Mr. McNary laid out. My idea was to lay out a plan and get it going myself and then find an instructor to carry it on. That is still what I want to do. I am not positive how I am going to go at it, but I have a general idea.

Another thing I want to pull out of this work is a method of checking up the ability of a mechanic. That is, if a man is a fourth-class mechanic and he wants a third-class rating, I think he should be put through some kind of examination that will determine whether he is able to hold down that third-class rating or not. I think there ought to be some check on the shop foreman. Incidentally I have had some of these fellows come to me and ask me if I wouldn't start a night school. It is the most interesting teaching proposition I ever went into myself. It is simply a question of prepare your stuff and feed it out to the men; he is awfully hungry, believe me.

Cooperation of the foremen: I have had great cooperation from the foremen of the shop. I have no fault to find. They seem to think I can help them, and they have been very willing to help me.

I would like to give this idea which came to me very naturally, that is, I think that with regard to instruction in shipbuilding Mr. McNary's plan is unquestionably the right plan from anything I can see or know of any educational lines. He speaks of a centralization of educational forces, and that is what we need, I think. We need all men working together on an educational line.

Another idea has occurred to me: Is there any opportunity to work women under these conditions? Let me give you this idea. I don't believe essentially in bringing women into industrial work, but we have, we will say, a man running machines. Now, is it possible (women are running machines in different parts of the country) is it possible to put women to running those machines and take those men out and put them in as riveters or ship-fitters' helpers? Is it possible to put them on work that women are capable of handling?

Draft: I lost three or four men as helpers. Now, the three or four men I had trained. If they hadn't got them I don't know what they would have done. We were affected by the draft. It seems to me that the men that are drafted—it is just as feasible to draft them into our line, but that is beyond me. The gentlemen at Fore River, I think, had some

start over me. They had some instructors who had some business experience to start with. I had to take my instructors and train them.

Mr. BLOOMFIELD. I am going to ask Mr. Henderson to report to us.

Mr. HENDERSON. We were asked to report more fully on the four points acted on by the body this morning. On the subject of *scamping*, to eliminate as far as possible the process of *scamping*, it is recommended first, that the *employment department of each yard see to it that men from other yards doing Government work are not employed without clearance papers from the local, Federal, or State employment bureau at the point where they last worked.* Second, that *steps be taken to induce the Government to standardize the wage scale and hours of labor in the various yards, taking into account conditions in the different districts.* The second point is the *regulation of the distribution of talent.* It is recommended that the *local, Federal, and State employment bureaus be used as far as possible in the distribution of men; that all requirements for men wanted be forwarded to the local bureau and advance notice of contemplated release of men be given to the bureaus.* The third point, *to train shipyard employment officers.* It is recommended that *monthly conferences of shipbuilding officials in various Federal districts or zones be held for the interchange of ideas and methods of employment, these conferences to be called by the district representative of the shipping board.* The fourth point—it is recommended that *each yard agree to install a definite program of shop instruction in its own yard, and cooperate with industrial schools and such other educational agencies as may be found available in each locality.* Now, it is recognized that these suggestions will impose a great deal more work on the Federal and State employment bureaus, and it has been suggested that a telegram be sent to Washington reading about as follows:

We are the representatives of 30 shipyards, building ships under the control of the United States Shipping Board Emergency Fleet Corporation and the Navy Department. Individually and in competition with each other and with other employers on Government work we feel unable to secure enough men to carry out our shipbuilding schedules, and urge Government support and help by means of central labor employment agency, which we will use jointly. We earnestly recommend, therefore, that the item appropriating half million dollars be retained in urgent deficiency bill.

Mr. BLOOMFIELD. I would like to ask if the four items reported on in this resolution express the sentiment of this meeting. If so, will you make an appropriate motion?

[Moved and seconded that the resolution be transmitted to the proper authorities.]

Mr. BLOOMFIELD. The four items as written out will be sent to Admiral Bowles. The other item will be telegraphed to the proper authorities.

I would like to say one word in connection with one or two suggestions made. I think this conference, if it has done nothing else, has been justified in the very clear announcement of certain policies. They are in line with the very best ideas developed and believed in by England.

Those in favor of the resolutions please say "Aye;" those opposed. (Delegates comply.) The vote is unanimous.

Mr. BLOOMFIELD. We will now hear from Mr. Morgan, who represents the International Carpenters Union, and we are here to have all the views and all the information we can to help the Government's work.

Mr. MORGAN. I didn't come here to talk; I came here to listen. There have been many phases of the situation here which have been very interesting to me, and in listening to your committee and your resolutions, I feel the set of resolutions as drawn up by your committee will meet the cooperation of the men, not only that are in your yards, but the men that are representing the international union. I was somewhat surprised to be here alone. I thought other international unions that were interested in the shipbuilding industry would be represented here, but I find I am alone here among the employers, and it is not my first occasion.

My international union has gone on record as turning over to the Government the entire organization in whatever capacity the Government desires to use it during this war. I have just about now completed the job I had in hand, and it was quite a large job. I had charge of the cantonment up at Ayer, Mass. I had 3,600 carpenters there. We didn't have a particle of trouble on the entire job. The job is practically complete to-day, with the addition of a hundred buildings we are now putting up. They can show you, by the hearty cooperation of our organization, what we have done in regard to the building of that camp. I want the shipbuilders of the entire New England States to feel that the carpenters' organization, in whatever capacity we can be of assistance to them, will gladly lend whatever assistance it can to you men. I feel there are many things that we can do. One of the speakers here said the ship carpenters died with the old wooden ships.

Now, I, in my younger days, worked on wooden ships and know something of the building of ships, and I am not dead by a long shot. I, however, want to say that in the wooden end of it (that is the end I am mostly interested in) that large numbers of carpenters can be trained to take up the wooden end of the shipbuilding. There is no question about that, with their knowledge of the tools and with their mechanical knowledge along other construction lines. I feel if you men want to get in touch with me or my international office, which is at Indianapolis, Ind., we will be only too glad to communicate with you. At the starting of the war I was delegated to cover New England and get a line on the men that were willing to take up Government work. We have to-day at our general office, according to the statistics gathered by a general secretary, about 35,000 competent ship carpenters that are registered from different parts of the country belonging to our union, and these men, if the proper compensation was given to them, there is no doubt in my mind could be divided and sent to different parts of the country. We have 65,000

organized carpenters in New England, and they are familiar with ship construction work, and as I said before, we are willing to cooperate with you men in every way possible. I realize this, that without labor you men are powerless. The Government can give you the material, can give you the contracts, and if we would sit down, put our feet under the table and talk in a heart-to-heart way, then I feel the labor troubles are settled.

I am glad to know that the shipbuilding end of it is going back to the old apprenticeship system and trying to train the boys to do the work. What has been true of the building construction end of the game is true in the shipbuilding game. When a fellow got efficient along certain lines, whether it was riveting or fitting, he was stolen by the other fellow by a little increase in pay, and they didn't put in any energy to train a boy along different lines, whether it was the ship fitting or riveting. Now you see your folly in the past, and I hope if the war brings out nothing else it will bring out this: The boy has got to be trained along certain lines, and you men are the men who must train the boy along those lines.

I thank you for asking me to attend this meeting here, and, as I said, anything my union can do to help you men it will be only too glad to do.



MSH # 21-184

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